

Prescription and Over-the-Counter Drug Abuse Project

*Fiscal Year 11/12 Evaluation Report
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I. Introduction

Funded by the County of Orange Health Care Agency's Alcohol and Drug Education and Prevention Team (ADEPT), Community Service Programs, Inc. (CSP) Project Positive Action Toward Health (PATH) is a non-profit community-based alcohol and other drug (AOD) prevention and education program. This initiative serves Orange County with a goal of reducing prescription and over-the-counter (Rx/OTC) drug abuse by conducting a media campaign and free educational workshops to youth, parents, school personnel, community members, key stakeholders, law enforcement agencies, and other interested groups within the selected cities of Fullerton, Mission Viejo, Newport Beach, and Orange. In addition, the project provides educational workshops to health professionals in the city of Anaheim.

With a mission of creating safe and healthy communities, Project PATH uses a community-based, environmental approach to prevention that includes the following strategies: incorporating Rx/OTC drug abuse education and prevention strategies in schools, colleges/universities, faith- and community-based organizations, community centers, health-based organizations, and retail establishments; creating working partnerships to address prescription and over-the-counter drug abuse among youth; and collaborating with local law enforcement and organizations to develop prevention campaigns based on prescription and over-the-counter drug abuse data. The project's efforts focus on mobilizing communities, raising awareness, and partnering with health care professionals to improve prevention efforts.

Targeting the four selected cities of Fullerton, Mission Viejo, Newport Beach, and Orange, the Project PATH Rx/OTC Drug Abuse initiative provided education about prescription and over-the-counter drug abuse among youth. In each of the selected cities during the 2011-12 fiscal year, Project PATH staff implemented a media campaign designed to increase adult awareness of the prevalence, adverse consequences, and appropriate action to prevent Rx/OTC drug abuse among youth; provided education to adults on the problems and adverse consequences of Rx/OTC drug abuse among youth, and followed-up with a sample of those educated regarding action they have taken to reduce Rx/OTC drug abuse; and, provided education to youth that Rx/OTC drugs are not safer than street drugs and on the adverse consequences of Rx/OTC drug abuse. Additionally in a new selected city of Anaheim, Project PATH provided education to health professionals to increase their awareness of problems and knowledge of adverse consequences of Rx/OTC drug abuse among youth, as well as provided reinforcing prevention messages and followed-up with health professionals educated regarding action they have taken to reduce Rx/OTC drug abuse among youth.

II. Evaluation Methods

CSP Project PATH contracted with an independent consulting firm, EVALCORP Research & Consulting, to create an evaluation framework for and conduct an overall evaluation of the eleven performance objectives and eight performance measures that were established by ADEPT for the Rx/OTC Drug Abuse initiative to accomplish during the 11-12 fiscal year.

The eleven performance objectives were as follows:

1. By June 30, 2012, at least 30% of adults surveyed within each of the four selected cities shall report increased awareness of the prevalence of prescription and over-the-counter drug abuse among youth.
2. By June 30, 2012, at least 30% of adults surveyed within each of the four selected cities shall report increased awareness of the adverse consequences of prescription and over-the-counter drug abuse among youth.

3. By June 30, 2012, at least 30% of adults surveyed within each of the four selected cities shall recognize appropriate action they can take to prevent prescription and over-the-counter drug abuse among youth.
4. By February 29, 2012, at least 70% of adults educated shall report increased awareness of the problems of prescription and over-the-counter drug abuse among youth.
5. By February 29, 2012, at least 70% of adults educated shall report increased knowledge of the adverse consequences of prescription and over-the-counter drug abuse among youth.
6. By June 30, 2012, at least 50% of the follow-up adult sample shall report having taken at least one action to reduce prescription and over-the-counter drug abuse.
7. By June 30, 2012, at least 70% of youth educated within each of the four selected cities shall report that prescription and over-the-counter drugs are not safer than street drugs.
8. By June 30, 2012, at least 70% of youth educated within each of the four selected cities shall report increased knowledge of the adverse consequences of prescription and over-the-counter drug abuse.
9. By February 29, 2012, at least 70% of health professionals educated within the new selected city shall report increased awareness of the problems of prescription and over-the-counter drug abuse among youth.
10. By February 29, 2012, at least 70% of health professionals educated within the new selected city shall report increased knowledge of the adverse consequences of prescription and over-the-counter drug abuse among youth.
11. By June 30, 2012, at least 50% of the follow-up health professional sample shall report having taken at least one action to reduce prescription and over-the-counter drug abuse among youth.

In addition, the eight performance measures included:

- A. By September 15, 2011, complete a media campaign plan for each of the four selected cities.
- B. By June 30, 2012, conduct one mass media campaign in each of the four selected cities to increase awareness of the prevalence, adverse consequences and appropriate action adults can take to prevent prescription and over-the-counter drug abuse among youth.
- C. By February 29, 2012, provide education to a minimum of 200 adults within the four selected cities, in aggregate, on prescription and over-the-counter drug abuse among youth.
- D. By June 30, 2012, conduct a follow-up with at least 100 adults who have been educated to assess actions they may have taken to prevent prescription and over-the-counter drug abuse.
- E. By June 30, 2012, provide education to a minimum of 225 youth within each of the four selected cities on the concept that prescription and over-the-counter drugs are not safer than street drugs.
- F. By June 30, 2012, provide education to a minimum of 225 youth within each of the four selected cities on the adverse consequences of prescription and over-the-counter drug abuse.
- G. By February 29, 2012, provide education to a minimum of 50 health professionals within a new selected city on methods to reduce prescription and over-the-counter drug abuse.
- H. By March 31, 2012, provide two reinforcing prevention messages to those health professionals previously educated on methods to reduce prescription and over-the-counter drug abuse.

As a means of determining whether Project PATH attained its goals, the following primary research questions guided the evaluation:

- To what extent did the Rx/OTC Drug Abuse initiative achieve its proposed performance objectives and measures?
- What, if any, challenges or barriers were encountered during the project's implementation? If so, how were they overcome?
- What were the primary lessons learned and what are recommendations for similar initiatives in the future?

The evaluation framework was participatory and included input from project staff and other key stakeholders throughout the data collection and evaluation process. For instance, EVALCORP collaborated with Project PATH to develop all data collection tools to support the evaluation. Project PATH staff was responsible for data collection (e.g., survey administration, tracking mechanisms, etc.) and related activities. The evaluators provided ongoing evaluation-related technical assistance and conducted all statistical/data analysis. The evaluators also conducted a staff assessment to gain insight for interpreting findings and information on the major accomplishments, surprising or unintended outcomes, challenges, and lessons learned throughout the project's implementation. In addition, EVALCORP reviewed and analyzed all project documents, training and presentation slides, media campaign plans, advertisements, campaign materials, progress reports, and tracking tools provided by Project PATH staff to determine whether the performance objectives and performance measures were met.

III. Media Campaign-Related Objectives and Measures

As discussed above, the Rx/OTC Drug Abuse initiative had eleven performance objectives and eight performance measures during the 11-12 fiscal year. The following four sections evaluate the extent to which the project achieved its performance objectives and measures, which are organized as they relate to the Rx/OTC mass media campaigns and education for adults, youth, and health professionals.

Performance Measures A and B: Media Plans and Campaigns

- By September 15, 2011, complete a media campaign plan for each of the four selected cities.
- By June 30, 2012, conduct one mass media campaign in each of the four selected cities to increase awareness of the prevalence, adverse consequences, and appropriate action adults can take to prevent prescription and over-the-counter drug abuse among youth.

Media Plans

Project PATH developed a preliminary media campaign plan for each of the four selected cities, with consultation provided by the evaluators. Each media campaign plan specified the proposed type, timing and placement of media, along with indicating the target audience and exposure rate when known. Project staff submitted the preliminary media campaign plans for each selected city to ADEPT on September 2, 2011. After receiving feedback from ADEPT and revising the media campaign plans accordingly, project staff submitted a final media plan for each of the selected cities to ADEPT on September, 15, 2012. Therefore, this performance measure was met.

Media Campaigns

Project PATH developed and distributed “Good Meds, Bad Behavior” advertisements and marketing materials within each of the four targeted cities of Fullerton, Mission Viejo, Newport Beach, and Orange in order to increase awareness about the prevalence, adverse consequences, and actions adults can take to prevent Rx/OTC drug abuse among youth. Additionally, Project PATH collaborated with a variety of organizations, including schools, colleges/universities, hospitals/clinics, police departments, community centers, libraries, shopping malls/farmer’s markets, faith- and community-based organizations, and media outlets to gain support for and promote the media campaign. Through these collaborations, Project PATH was able to distribute various types of “Good Meds, Bad Behavior” campaign materials and advertisements such as billboard ads, bus shelter ads, banners, posters, flyers, brochures, newsletters and postcards that were displayed at community centers, youth centers, parent meetings, libraries, city offices, shopping malls/farmer’s markets, hospitals/clinics, schools, colleges/universities, and health fairs. Additionally, project staff members were interviewed on radio shows, placed articles and advertisements in local magazines, and used PSAs in movie theaters and on television networks such as A&E, TLC, and BBC America in the selected cities to increase awareness about prevalence, adverse consequences, and actions to prevent Rx/OTC drug abuse among a larger audience.

As described above and indicated in project tracking tools and progress reports, the media campaign in each city employed more than four different types of media and exposed at least one media component to the target audience for more than six months. Therefore, this performance measure has been met and exceeded.

Performance Objectives 1, 2 and 3: Media Campaign Outcomes

- By June 30, 2012, at least 30% of adults surveyed within each of the four selected cities shall report increased awareness of the prevalence of prescription and over-the-counter drug abuse among youth.
- By June 30, 2012, at least 30% of adults surveyed within each of the four selected cities shall report increased awareness of the adverse consequences of prescription and over-the-counter drug abuse among youth.
- By June 30, 2012, at least 30% of adults surveyed within each of the four selected cities shall recognize appropriate action they can take to prevent prescription and over-the-counter drug abuse among youth.

Data Collection and Analysis

To measure the impact of the media campaign on adults’ awareness about the prevalence, adverse consequences, and actions they can take to prevent Rx/OTC drug abuse among youth, the Prescription and Over-the-Counter Drug Abuse Awareness Survey was developed by project staff in collaboration with the evaluation team and ADEPT. After an initial version of the survey had been developed and was beginning to be administered by project staff, it was determined that a dummy ad should be included along with the “Good Meds, Bad Behavior” ad on the Prescription and Over-the-Counter Drug Abuse Awareness Survey in order to assess to what, if any, extent respondents may be reporting they had seen the ad(s) when in fact they had not. The survey was revised accordingly and tested with adults in the target populations. Additional revisions were made to the format of the survey to minimize confusion respondents had with differentiating between the two ads and the follow-up questions related to each ad seen.

The final version of the Prescription and Over-the-Counter Drug Abuse Awareness Survey was separated into two vertical columns with the same five questions pertaining to each advertisement in each column. The first survey item at the top of each column showed respondents an image of the ad (i.e., the “Good Meds, Bad

Behavior” ad or the dummy ad) and asked if they had seen the ad. If respondents had seen the ad, they were asked to complete follow-up questions about each ad they had seen, asking where they had seen the ad, and to indicate to what extent the ad seen had made them more aware of the prevalence and adverse consequences of Rx/OTC drug abuse among youth, using a 4-point Likert scale with the following definitions: 1 = no, not at all; 2 = yes, a little; 3 = yes, somewhat; and, 4 = yes, a lot more aware. Finally, respondents were asked to select which actions people can take to prevent Rx/OTC drug abuse among youth as a result of seeing the ad indicated above.

Between the months of November 2011 and June 2012, Project PATH staff administered the Prescription and Over-the-Counter Drug Abuse Awareness Survey to adults across the four targeted cities at numerous locations including: health and resource fairs, schools, colleges/universities, Parent Teacher Student Association meetings, community centers and events, libraries, community-based organizational meetings, and shopping malls/farmer’s markets. This survey was administered in both English and Spanish versions.

Initially, project staff had difficulties finding locations to administer the survey, particularly in Mission Viejo and Newport Beach. Staff had to be creative to gain access to administer surveys in locations in which respondents were more likely to have been exposed to see the media campaign over a period of time, such as the Kaleidoscope mall. Another primary data collection challenge reported by project staff was obtaining community members’ participation in the survey as many people approached were not willing to take the survey. To overcome this challenge, staff encouraged participation by asking respondents for their opinions on the media campaign, showed respondents the ads, and administered the survey verbally. This interview-like process was also helpful with some participants who were confused by the Likert-scale response options used in the two items assessing the ads’ impact on awareness, particularly with Spanish-speaking respondents.

Another challenge was that some respondents told staff they had seen the campaign but then indicated on the survey that they had not seen the “Good Meds, Bad Behavior” ad because it looked differently than the ad they had seen (e.g., it was in a horizontal format on the survey instead of a vertical format used in some media materials). Finally, some respondents who saw the campaign said they were already aware of the problem so the ad did not increase their awareness. This may be the result of respondents being exposed to other similar campaigns or to the “Good Meds, Bad Behavior” campaign and education that has been conducted by this initiative in the selected cities for the past three years.

The evaluators calculated response frequencies for each survey item on the Prescription and Over-the-Counter Drug Abuse Awareness Survey by each of the four selected cities and in aggregate. The analysis of items assessing impact of the “Good Meds, Bad Behavior” ad on the respondents’ awareness did not include data from respondents who indicated that they had seen the dummy ad. Exploratory ANOVAs were run to see if there were significant differences in findings between those who reported only seeing the real “Good Meds, Bad Behavior” ad compared to those who reported seeing the dummy ad. However, it was determined that the varied sample sizes between those who reported seeing the real ad (N=828) and those who reported seeing the dummy ad (N=25) could lead to inaccurate results when comparing differences between these two groups. Due to this lack of confidence in the possible findings, these comparisons were excluded from the data analysis.

Findings from Prescription and Over-the-Counter Drug Abuse Awareness Survey

Of the 2,336 total Prescription and Over-the-Counter Drug Abuse Awareness Surveys collected across the four selected cities, 62% of the survey respondents (N=1,437) indicated that they had not seen either ad on the survey and 38% of the respondents (N=899) indicated that they had seen at least one ad. Of the 899 surveys collected from respondents who indicated seeing at least one ad, 27% of the surveys came from Orange, 26% from Fullerton, 24% from Mission Viejo, and 23% from Newport Beach. In order to assess the impact of the media campaign, the following findings only include survey data from respondents who indicated seeing at least

one ad and do not include data from respondents who did not see any of ads shown on the survey (i.e., the “Good Meds, Bad Behavior” real ad and/or the dummy ad). In addition, all analyses done for those who had seen the real ad did not include survey data from those who indicated seeing the dummy ad. When asked which, if any, of the ads they had seen, 92% of respondents who had seen at least one ad across all four cities indicated only seeing the “Good Meds, Bad Behavior” ad, 3% reported only seeing the dummy ad, and 5% indicated seeing both ads. As shown in **Table 1**, the percent of respondents who had seen each ad varied by the city.

Table 1. Percent of Respondents Who Indicated Seeing Each Ad by City					
Ad Seen	All	Fullerton	Mission Viejo	Newport Beach	Orange
	N=899	N=233	N=217	N=210	N=239
Seen GMBB ad only	92%	94%	93%	96%	87%
Seen dummy ad only	3%	3%	3%	3%	2%
Seen both ads	5%	3%	4%	1%	11%

Note: “N” refers to the total number of survey respondents who had seen the ad(s) in aggregate and by city.

Respondents across all four cities who had only seen the “Good Meds, Bad Behavior” ad reported seeing the campaign ad in the following manners: 29% saw it on a school or college campus, 16% on a billboard/banner, 15% at a mall/theater, 13% on a bus shelter, 11% on a flyer/postcard, 9% at a library/city building/hospital, 6% on the internet/facebook, 5% in a newspaper/newsletter/Penny Saver/magazine, and 15% in “other” ways. As shown in **Table 2**, the locations and methods in which the media campaign was seen varied by city. Respondents across the four cities indicated seeing the ad in the following “other” manners: farmer’s market (n=30), community or senior centers (n=19), television/commercials (n=18), community events such as Magic Run, Take Back Day, and Faces (n=14), apartment community (n=10), presentation/workshops (n=7), school/PTSA Meeting (n=7), pharmacy/doctor’s office/health center (n=5), at work or a business such as Letner Roofing (n=5), city/community areas such as Aliso Viejo, Cerritos/Lakewood, and Orange Circle (n=4), and mall/movie theater such as Kaleidoscope (n=2). In addition, nine respondents indicated that they were not sure which “other” location they had seen the ad.

Table 2. Where Respondents Have Seen the “Good Meds, Bad Behavior” Media Campaign by City					
Response	All*	Fullerton	Mission Viejo	Newport Beach	Orange
	n=832	n=220	n=203	n=202	n=207
School/College Campus	29%	48%	14%	10%	43%
Billboard/Banner	16%	10%	10%	26%	20%
Mall/Theater	15%	1%	41%	18%	2%
Bus/Bus Shelter	13%	19%	11%	9%	13%
Flyer/Postcard	11%	10%	7%	16%	13%
Library/City Building/Hospital	9%	4%	9%	16%	8%
Internet/Facebook	6%	4%	8%	7%	5%
Newspaper/Newsletter/Penny Saver/Magazine	5%	6%	3%	6%	6%
Other	15%	16%	15%	14%	15%

Note: Percentages exceed 100% as respondents were asked to check all that apply; “n” refers to the number of participants who responded to this survey item in aggregate and by city.

To assess if the performance objectives were met, respondents who had seen the “Good Meds, Bad Behavior” ad or the dummy ad were asked to indicate the extent to which their awareness of prevalence, adverse consequences, and actions people can take to reduce Rx/OTC drugs changed as a result of seeing the ads. As shown in **Table 3**, 91% of the respondents in aggregate who had only seen the “Good Meds, Bad Behavior” ad (with 93% in Orange, 90% in Fullerton, 90% in Mission Viejo, and 90% in Newport Beach) indicated that they were now either “yes, a little,” “yes, somewhat,” or “yes, a lot more aware” of how often Rx/OTC drug abuse occurs among youth. Therefore, performance objective 1 was exceeded as on average 91% of adults surveyed within each of the four selected cities who had seen the media campaign reported increased awareness of the prevalence of Rx/OTC drug abuse among youth as a result of the mass media campaign. The reported increased awareness by city was 93% in Orange, 90% in Fullerton, 90% in Mission Viejo, and 90% in Newport Beach.

Similarly, 90% of the respondents in aggregate who had only seen the “Good Meds, Bad Behavior” ad indicated that they were now either “yes, a little,” “yes, somewhat,” or “yes, a lot more aware” of the negative consequences of Rx/OTC drug abuse among youth, with 93% in Orange, 91% in Mission Viejo, 88% in Newport Beach, and 88% in Fullerton. Therefore, performance objective 2 was exceeded as on average 90% of adults surveyed within each of the four selected cities who had seen the media campaign reported increased awareness of the adverse consequences of Rx/OTC drug abuse among youth as a result of the mass media campaign, with increased awareness by 93% of respondents seeing the campaign in Orange, 91% in Mission Viejo, 88% in Newport Beach, and 88% in Fullerton.

Table 3. Impact of Ads on Respondents’ Awareness of Prevalence and Consequences by Ad Seen and City						
<i>As a result of seeing ad ...</i>	Ad Seen	All	Fullerton	Mission Viejo	Newport Beach	Orange
Are you now more aware of how often Rx/OTC drug abuse occurs among youth?	GMBB ad only (n=828)	91%	90%	90%	90%	93%
	Dummy ad (n=25)	84%	71%	100%	86%	80%
Are you now more aware of the negative consequences of Rx/OTC drug abuse among youth?	GMBB ad only (n=820)	90%	88%	91%	88%	93%
	Dummy ad (n=25)	88%	71%	100%	87%	100%

Note: “n” refers to the number of participants in aggregate who responded to this survey item who had seen that ad.

As seen in **Table 4**, 97% of the respondents in aggregate who had only seen the “Good Meds, Bad Behavior” ad (with 98% in Orange, 98% in Newport Beach, 96% in Fullerton, and 94% in Mission Viejo) selected at least one action people can take to prevent Rx/OTC drug abuse among youth. Across the four cities, about half of the respondents indicated that adults could secure medications (58%); discard unused, unneeded or expired medications (57%); talk with youth about dangers of Rx/OTC drugs (52%); talk with family and friends about ways to prevent Rx/OTC drug abuse (52%); and monitor all medications (48%) to prevent Rx/OTC drug abuse among youth. Thus, performance objective 3 was exceeded as on average 97% of adults surveyed within each of the four selected cities who had seen the media campaign recognized appropriate action they can take to prevent Rx/OTC drug abuse among youth as a result of the mass media campaign. The percent of respondents recognizing at least one appropriate action to prevent Rx/OTC abuse among youth by city was 98% in Orange, 98% in Newport Beach, 96% in Fullerton, and 94% in Mission Viejo.

Table 4. Impact of Ads on Respondents' Recognition of Preventative Actions by Ad Seen and City						
Actions	Ad Seen	All	Fullerton	Mission Viejo	Newport Beach	Orange
Indicated at least one action	GMBB ad only	97%	96%	94%	98%	98%
	Dummy ad	98%	100%	100%	100%	96%
Secure medication so youth do not have access to them	GMBB ad only	58%	55%	53%	64%	60%
	Dummy ad	62%	83%	38%	0%	67%
Discard unused, unneeded and expired medications	GMBB ad only	57%	54%	53%	62%	60%
	Dummy ad	45%	50%	38%	0%	48%
Talk with youth about the dangers of Rx/OTC drug abuse	GMBB ad only	52%	51%	55%	56%	46%
	Dummy ad	45%	50%	50%	100%	41%
Talk with family and friends about ways to prevent Rx/OTC drug abuse	GMBB ad only	52%	55%	52%	51%	52%
	Dummy ad	45%	50%	50%	0%	44%
Monitor all medications (i.e., keep track of amount of medications)	GMBB ad only	48%	47%	46%	53%	46%
	Dummy ad	43%	67%	25%	0%	44%
None of the above	GMBB ad only	3%	4%	6%	2%	2%
	Dummy ad	2%	0%	0%	0%	4%

Note: Percentages do not add to 100% as respondents were asked to check all that apply.

IV. Adult Education-Related Objectives and Measures

Performance Measure C: Adult Educational Workshops

- By February 29, 2012, provide education to a minimum of 200 adults within the four selected cities, in aggregate, on prescription and over-the-counter drug abuse among youth.

A comprehensive review of the initiative's tracking materials, quarterly progress reports, presentation materials, and surveys collected indicated that this performance measure was met and exceeded. Across all four selected cities, Project PATH conducted a total of 21 educational workshops on Rx/OTC drug abuse among youth for parents, school and other youth-serving personnel. From August 2011 through February 2012, the project educated 374 adults across the four cities. However to fulfill requests of collaborative partners, project staff provided educational workshops to 64 additional adults in March and April 2012. Therefore throughout the 11-12 fiscal year, Project PATH educated a total of 438 people across the four selected cities, with 144 adults educated in Mission Viejo, 130 in Orange, 101 in Fullerton, and 63 in Newport Beach.

To meet this performance measure, Project PATH collaborated with a variety of organizations, agencies, and people to garner support for the project and access to parents, school and other youth-serving personnel to educate in the workshops. Through the collaborative relationships established, Project PATH was able to reach parents and youth-serving adults in presentations at family resource centers, community centers, schools, colleges, Parent Teacher Student Association meetings, and community-based organizational meetings. Project staff did not report any challenges to implementing this performance measure.

Performance Objectives 4 and 5: Adult Educational Workshop Outcomes

- By February 29, 2012, at least 70% of adults educated shall report increased awareness of the problems of prescription and over-the-counter drug abuse among youth.
- By February 29, 2012, at least 70% of adults educated shall report increased knowledge of the adverse consequences of prescription and over-the-counter drug abuse among youth.

Data Collection and Analysis

To determine whether workshop participants increased awareness and knowledge of the problems, adverse consequences and actions to reduce Rx/OTC drug abuse by youth, the Prescription and Over-the-Counter Drug Abuse Knowledge Survey was developed by Project PATH and the evaluation team. This post-survey was administered by Project PATH staff to all workshop participants at the conclusion of the workshops within each of the four selected cities. This survey consisted of seven closed-ended items that assessed respondents' awareness and knowledge about Rx/OTC drugs, adverse consequences, and actions to prevent Rx/OTC drug abuse by youth. The first two survey items were statements regarding consequences of Rx/OTC drugs, to which respondents were to select either "true" or "false" from the response options. The following two survey items were in multiple choice format and asked respondents about types of OTC drugs and consequences of Rx/OTC drugs. In addition, two following items asked respondents to indicate the extent to which their awareness and knowledge increased as a result of the presentation, using a 4-point Likert scale with the following definitions: 1 = no, not at all; 2 = yes, a little; 3 = yes, somewhat; and, 4 = yes, a lot more. Lastly, the final item asked respondents to indicate from a provided list the possible actions people can take to prevent Rx/OTC drug abuse among youth. Respondents could indicate as many of the available options as they thought appropriate.

From August 2011 through April 2012, project staff collected Prescription and Over-the-Counter Drug Abuse Knowledge Surveys from participants at educational workshops across the four cities at community centers, Parent Teacher Association meetings, other meetings at schools, colleges/universities, faith- and community-based organizational meetings, and libraries. This survey was administered in both English and Spanish.

Similar to the Prescription and Over-the-Counter Drug Abuse Awareness Survey, project staff reported some challenges when administering the Spanish version of the Knowledge Survey as some Spanish-speaking respondents had difficulties understanding the wording of the items. To overcome this challenge, project staff explained the statements and response options to the respondents when necessary. Project staff also noticed that some respondents had difficulty or confusion with the question on dextromethorphan as some respondents thought the correct response was morphine instead of dextromethorphan. Response frequencies were calculated by the evaluation team for each survey item on the Prescription and Over-the-Counter Drug Abuse Knowledge Surveys from the four selected cities in aggregate.

Findings from Prescription and Over-the-Counter Drug Abuse Knowledge Survey

Across the four selected cities, a total of 438 Prescription and Over-the-Counter Drug Abuse Knowledge Surveys were collected, with 33% of the surveys from Mission Viejo, 30% from Orange, 23% from Fullerton, and 14% from Newport Beach. Survey results indicated that almost all of the respondents selected the correct response to the four items measuring their knowledge of Rx/OTC drugs and adverse consequences that were presented in the educational workshop. **Table 5** shows the four knowledge items, correct responses, and the percentage of survey respondents in aggregate who selected the correct survey response.

Table 5. Percent of Correct Responses on Prescription and Over-the-Counter Drug Abuse Knowledge Survey Items

Survey Item	Correct Response	% Correct Responses
Prescription and over-the-counter drug abuse can lead to increased behavioral problems, poor academic performance, truancy and other alcohol, tobacco and drug use. (n=438)	True	99%
Increases in prescription and over-the-counter drug abuse are linked with increased Emergency Room visits, crime, and overdose deaths. (n=436)	True	99%
Which of the following is an active ingredient found in many over-the-counter cough and cold medicines that can cause delusions, blurred vision, seizures and brain damage if abused? (n=425)	Dextromethorphan	88%
Adverse consequences associated with ‘Pharming’ include: (n=430)	All of the above (Lethal doses, allergic reactions, drug interactions)	85%

Note: “n” refers to the number of participants who responded to each survey item.

As shown in **Table 6**, 98% of all respondents indicated that they are either “yes, a little,” “yes, somewhat,” or “yes, a lot more aware” about the prevalence of Rx/OTC drug abuse among youth and the adverse consequences of Rx/OTC drug abuse among youth as a result of the workshop. Therefore, performance objective 4 has been met and exceeded with 98% of the respondents on average demonstrating increased awareness of the problems of Rx/OTC drug abuse among youth as a result of the presentation. In addition, performance objective 5 has also been met and exceeded with 98% of the respondents on average demonstrating increased knowledge of the adverse consequences of Rx/OTC drug abuse among youth as a result of the educational workshop.

Table 6. Impact of Educational Workshops on Respondents’ Awareness and Knowledge Across Cities

As a result of this workshop ...	No, not at all	Yes, a little	Yes, somewhat	Yes, a lot more aware
Are you more aware of the problems of Rx/OTC drug abuse among youth? (n=433)	2%	16%	15%	67%
Do you know more about the negative consequences of Rx/OTC drug abuse among youth? (n=435)	2%	17%	17%	64%

Note: “n” refers to the number of participants who responded to each survey item.

Furthermore, as seen in **Table 7**, nearly all of the respondents (98%) reported at least one action people can take to prevent Rx/OTC drug abuse, including securing medication (85%); talking with family or friends about the dangers of Rx/OTC drug abuse (85%); discarding unused, unneeded, and expired medications (83%); and monitoring all medications (78%) as a result of the workshop.

Table 7. Impact of Educational Workshops on Respondents' Recognition of Preventative Actions		
As a result of this workshop ...	Response	%
Which of the following actions do you think people can take to prevent Rx/OTC drug abuse among youth? (n=438)	Indicated at least one action	98%
	Secure medications so youth do not have access to them	85%
	Talk with family or friends about the dangers of Rx/OTC drug abuse	85%
	Discard unused, unneeded, and expired medications	83%
	Monitor all medications (i.e., keep track of amount of medications)	78%
	None of the above	2%

Note: Percentages do not add to 100% as respondents were asked to check all that apply; "n" refers to the number of participants who responded to the above survey item.

Performance Measure D: Adult Follow-Up

- By June 30, 2012, conduct a follow-up with at least 100 adults who have been educated to assess actions they may have taken to prevent prescription and over-the-counter drug abuse.

Project PATH collaborated with the organizations they had previously partnered with to be allowed to return to the family resource centers, community centers, schools/colleges, Parent Teacher Student Association meetings, and community-based organizational meetings where they previously presented educational workshops in order to follow-up with the parents, school and other youth-serving personnel who had been educated in the workshops at least 30 days prior in order to assess the impact of the workshop on respondents' actions. Although the project presented workshops to adults at meetings/classes who met continuously to increase the likelihood of following-up with workshop participants, project staff found that only some of the adults who attended the workshop would be in attendance at subsequent meetings/classes when project staff attempted to follow-up with them. In addition, some of the organizational meetings/classes were no longer meeting 30 days after the original workshop. Therefore, it was difficult for project staff to follow-up with previous workshop participants through those locations. To overcome this challenge, project staff members obtained sign-in sheets with contact information from some of the meetings and then called workshop participants to follow-up with them and administer the Prescription and Over-the-Counter Drug Abuse Follow-Up Survey by phone or electronically via e-mail.

This performance measure was exceeded as project staff followed-up with a total of 183 adults who attended their educational workshops at least 30 days prior and were willing to complete the Prescription and Over-the-Counter Drug Abuse Follow-Up Action Survey to share what, if any, actions to reduce Rx/TOC drug abuse among youth they had taken since attending the workshop. The number of participants followed-up with in each selected city included: 67 from Orange (37%), 46 from Fullerton (25%), 37 from Newport Beach (20%), and 33 from Mission Viejo (18%).

Performance Objective 6: Adult Follow-up Outcomes

- By June 30, 2012, at least 50% of the follow-up adult sample shall report having taken at least one action to reduce prescription and over-the-counter drug abuse.

Data Collection and Analysis

The Prescription and Over-the-Counter Drug Abuse Follow-Up Action Survey was developed by Project PATH and the evaluators in order to assess what actions previous educational workshop participants have taken to prevent Rx/OTC drug abuse as a result of the workshop. This survey consisted of one closed-ended item that asked respondents to indicate from a provided list which actions they have taken to prevent Rx/OTC drug abuse among youth since learning about Rx/OTC drug abuse in the workshop. Respondents were directed to select as many actions as they had taken from the list.

From December 2011 through May 2012, project staff collected Prescription and Over-the-Counter Drug Abuse Follow-Up Action Surveys from previous workshop participants across the four cities at community centers, libraries, local schools, colleges/universities, Parent Teacher Association meetings, and faith- and community based organizational meetings. To overcome challenges reaching previous workshop participants discussed in the section above, project staff also followed-up with some previous workshop participants by phone and e-mail to administer the survey. Response frequencies were calculated by the evaluation team for each response option on the Prescription and Over-the-Counter Drug Abuse Follow-Up Action Surveys collected from the four selected cities in aggregate.

Findings from Prescription and Over-the-Counter Drug Abuse Follow-Up Action Survey

As shown in **Table 8**, over three-quarters of the respondents (86%) indicated having taken at least one action to reduce Rx/OTC drug abuse among youth since learning about Rx/OTC drug abuse in the educational workshop. These actions included talking with family or friends about the dangers of Rx/OTC drug abuse (67%); discarding unused, unneeded, and expired medications (59%); securing medications (52%); and monitoring all medications (45%) and as a result of the workshop. Therefore, performance objective 6 has been met and exceeded with an average of 86% of the follow-up adult sample having taken at least one action to prevent prescription and over-the-counter drug abuse by youth.

Table 8. Impact of Educational Workshops on Respondents' Preventative Actions		
<i>Since learning about Rx/OTC drug abuse in our workshop ...</i>	Response	%
Which of the following actions, if any, have you taken to prevent Rx/OTC drug abuse among youth? (n=183)	Indicated at least one action	86%
	Talked with family or friends about the dangers of Rx/OTC drug abuse	67%
	Discarded unused, unneeded, and expired medications	59%
	Secured medications so youth do not have access to them	52%
	Monitored all medications (i.e., kept track of amount of medications)	45%
	I have not taken any actions to reduce Rx/OTC drug abuse	14%

Note: Percentages do not add to 100% as respondents were asked to check all that apply; "n" refers to the number of participants who responded to each survey item.

V. Youth Education-Related Objectives and Measures

Performance Measures E and F: Youth Educational Workshops

- By June 30, 2012, provide education to a minimum of 225 youth within each of the four selected cities on the concept that prescription and over-the-counter drugs are not safer than street drugs.
- By June 30, 2012, provide education to a minimum of 225 youth within each of the four selected cities on the adverse consequences of prescription and over-the-counter drug abuse.

In order to meet performance measures E and F, Project PATH developed and maintained collaborative relationships within each of the selected cities in order to provide prevention education to youth. A review of tracking documents and quarterly progress reports indicated that PATH reached out to several organizations and agencies in order gain support for the program and seek youth participation in educational workshops. Examples of organizations that Project PATH collaborated with included: school districts/high schools, Parent Teacher Student Associations, Friday Night Live chapters, faith- and community-based organizations and centers, police departments, hospitals/health centers, and youth programs such as Girls Inc. and the Boys and Girls Club. Furthermore, PATH distributed “Good Meds, Bad Behavior” media materials to their collaborative partners and various youth groups, centers, schools, and community locations to spread awareness about Rx/OTC drug abuse.

As a result of their collaborations, Project PATH was able to conduct a total of 31 educational workshops to youth, including nine workshops in Fullerton, eight in Newport Beach, seven in Mission Viejo, and seven in Orange. Across the four selected cities, Project Path provided education to 1,527 youth about the concept that Rx/OTC drugs are not safer than street drugs and on the adverse consequences of Rx/OTC drug abuse, with 570 educated in Fullerton, 412 in Orange, 275 in Newport Beach, and 270 in Mission Viejo. Therefore, performance measures E and F were met and exceeded.

Project PATH experienced some challenges when trying to obtain school district permission to present educational workshops in the city of Newport Beach. Due to their persistence, project staff members were able to overcome this challenge by facilitating a workshop to youth at the Corona Del Mar High School Red Ribbon Assembly and by presenting workshops at teen centers and day schools in Newport Beach. Another challenge experienced by the project when implementing the youth workshops is that some schools/teachers in the city of Orange requested that educational workshops occur at the end of the academic year. This presented a challenge as the project was not able to complete the workshops needed to educate the minimum number of youth in Orange until later in the fiscal year. Project staff overcame this challenge by scheduling as many workshops as they could earlier in the year and then also implementing the workshops requested at the end of the year.

Performance Objectives 7 and 8: Youth Educational Workshop Outcomes

- By June 30, 2012, at least 70% of youth educated within each of the four selected cities shall report that Rx/OTC drugs are not safer than street drugs.
- By June 30, 2012, at least 70% of youth educated within each of the four selected cities shall report increased knowledge of the adverse consequences of Rx/OTC drug abuse.

Data Collection and Analysis

In order to determine whether youth participants of the educational workshops demonstrated knowledge that Rx/OTC drugs are not safer than street drugs and also demonstrated increased knowledge of the adverse consequences of Rx/OTC drug abuse, Project PATH collaborated with the evaluation team to develop the Prescription and Over-the-Counter Drugs Youth Survey that was administered by Project PATH to all workshop participants at the end of each workshop. This post survey contained 10 closed-ended items. The first seven items on the survey examined participants' knowledge about adverse consequences of Rx/OTC drugs and the concept that Rx/OTC drugs are not safer than street drugs, using either multiple choice or true-false response option formats. The last three survey items asked respondents to indicate to what extent they agreed or disagreed with the statements relating to changes in their knowledge and behavior regarding Rx/OTC drug abuse as a result of the presentation, using a 4-point Likert scale with the following definitions: 1 = strongly disagree; 2 = disagree; 3 = agree; and, 4 = strongly agree.

From July 2011 through May 2012, project staff collected Prescription and Over-the-Counter Drug Abuse Youth Surveys from educational workshop participants across the four cities at high schools, day schools, community centers, and youth and teen centers. Across the four selected cities, a total of 1,527 youth completed surveys, including 570 youth in Fullerton, 412 in Orange, 275 in Newport Beach, and 270 in Mission Viejo.

When asked about data collection challenges, project staff reported that some youth had difficulty with the wording of the youth survey. For instance, the response options for the question on "effects of DXM abuse" didn't match up exactly as described in the presentation due to a change in presentation content. Furthermore, some youth didn't understand that "being arrested for driving under the influence of prescription and over-the-counter drugs" was a "legal consequence." In addition, some youth were confused by the response option wording that they "know more about prescription and over-the-counter drugs NOT being safer than street drugs." To overcome these challenges, project staff explained the phrasing of the items and response options whenever applicable.

The evaluation team calculated response frequencies for each survey item on the Prescription and Over-the-Counter Drug Abuse Youth Survey for each selected city and in aggregate.

Findings from Prescription and Over-the-Counter Drug Abuse Youth Survey

A total of 1,527 Prescription and Over-the-Counter Drug Abuse Youth Surveys were collected, with 37% of the surveys from Fullerton, 27% from Orange, 18% from Mission Viejo, and 18% from Newport Beach. The vast majority of youth participants selected the correct response to the seven items measuring knowledge of Rx/OTC drugs and their adverse consequences that were presented in the educational workshops. **Table 9** shows the seven knowledge items, correct responses, and the percentage of survey respondents in aggregate and in each of the selected cities who selected the correct survey response.

Regarding knowledge about the concept that Rx/OTC drugs are not safer than street drugs, 92% of youth in aggregate (with 95% in Mission Viejo, 95% in Newport Beach, 92% in Fullerton, and 91% in Orange) indicated that it was not safe to use prescription medicine without a doctor's note, and 88% of youth in aggregate (93% in Newport Beach, 88% in Fullerton, 88% in Mission Viejo, and 83% in Orange) indicated that Rx/OTC drugs are just as or more dangerous than street drugs on the true-false items. Furthermore on true-false and multiple choice items asking about the adverse consequences of Rx/OTC drugs, an average of 78% or more of the respondents provided the correct response to each item (see **Table 9**).

Table 9. Percent of Correct Responses on Prescription and Over-the-Counter Drug Abuse Youth Survey Items						
Survey Question	Correct Response Item	% Correct Post-Survey Responses				
		All	Fullerton	Mission Viejo	Newport Beach	Orange
1. Effects of DXM abuse may include:	All of the above (Stomach pain and nausea, seizures and brain damage, delusions and panic attacks)	88%	90%	87%	90%	85%
2. The group of prescription drugs that teens abuse the most are:	Painkillers	81%	80%	85%	88%	76%
3. A <u>legal</u> consequence of abusing Rx/OTC drugs is:	Being arrested for driving under the influence of Rx/OTC drugs	78%	81%	71%	90%	70%
4. Social consequence(s) of abusing Rx/OTC drugs can include:	All of the above (Getting a bad reputation, losing friends, having an unpredictable personality)	89%	89%	89%	92%	85%
5. It is safe to use prescription medicine without a doctor's note.	False	92%	92%	95%	95%	91%
6. Rx/OTC drugs are just as or more dangerous than street drugs.	True	88%	88%	88%	93%	83%
7. Negative effects of abusing pain relievers can include shortness of breath, lung failure and death.	True	91%	93%	91%	93%	88%

As shown in **Table 10**, 80% of all youth respondents indicated that they either “agree” or “strongly agree” that as a result of the presentation they know more about Rx/OTC drugs not being safer than street drugs, with 82% agreeing in Mission Viejo, 82% in Newport Beach, 80% in Fullerton, and 75% in Orange. Therefore, performance objective 7 has been met and exceeded with an average of 80% of the youth respondents demonstrating increased knowledge that Rx/OTC drugs are not safer than street drugs as a result of the educational workshop.

In addition, 83% of all youth respondents (with 85% in Newport Beach, 83% in Fullerton, 83% in Mission Viejo, and 79% in Orange) either “agree” or “strongly agree” that they know more about the adverse consequences of Rx/OTC drug abuse as a result of the presentation. Thus, performance objective 8 has also been met and exceeded with an average of 83% of youth respondents demonstrating increased knowledge of the adverse consequences of Rx/OTC drug abuse as a result of the educational workshop.

Table 10. Impact of Educational Workshops on Youth Knowledge and Behavior					
As a result of this workshop...	Total % Who Agree				
	All	Fullerton	Mission Viejo	Newport Beach	Orange
I know more about Rx/OTC drugs NOT being safer than street drugs. (n=1505)	80%	80%	82%	82%	75%
I know more about the adverse consequences of Rx/OTC drug abuse. (n=1506)	83%	83%	83%	85%	79%
I am less likely to abuse Rx/OTC drugs. (n=1502)	81%	82%	80%	87%	77%

Note: “n” refers to the number of participants who responded to each survey item.

Finally as far as behavior is concerned, 81% of all youth respondents agreed (indicating that they “agree” or “strongly agree”) that they are less likely to abuse Rx/OTC drugs as a result of the workshop (with 87% in Newport Beach, 82% in Fullerton, 80% in Mission Viejo, and 77% in Orange.)

VI. Health Professional Education-Related Objectives and Measures

Performance Measure G: Health Professional Educational Workshop

- By February 29, 2012, provide education to a minimum of 50 health professionals within a new selected city on methods to reduce prescription and over-the-counter drug abuse.

Project PATH developed collaborative relationships with a variety of organizations, hospitals/medical centers, and colleges/universities in Anaheim to gain support for the initiative and access to health professionals to provide educational workshops on methods to reduce Rx/OTC drug abuse. Additionally, PATH staff provided “Good Meds, Bad Behavior” media materials to their collaborative partners at local hospitals/health centers, colleges/ universities, and community-based organizations in this new city. Despite all of their outreach efforts, project staff found it challenging to obtain access to conduct educational workshops to practicing health professionals. Therefore, project staff focused their educational workshop efforts on health professional students in programs such as nursing, medical assisting and pharmacy technology to overcome this barrier.

PATH tracking documents, quarterly progress reports, presentation materials, and surveys collected were reviewed to determine that this objective was met and exceeded. As indicated by all of these materials, Project PATH conducted five educational workshops from October 2011 through February 2012 to a total of 175 health professionals in Anaheim. Five additional workshops were provided to 84 health professionals in Anaheim from March to May 2012. Thus, a total of 259 health professionals in Anaheim were educated on methods to reduce prescription and over-the-counter drug abuse during the 2011-12 fiscal year. Workshops were conducted at Pharmacy Tech, Medical Assisting, and Nursing classes at Summit College and United Education Institute College.

Performance Objectives 9 and 10: Health Professional Educational Workshop Outcomes

- By February 29, 2012, at least 70% of health professionals educated within the new selected city shall report increased awareness of the problems of prescription and over-the-counter drug abuse among youth.

- By February 29, 2012, at least 70% of health professionals educated within the new selected city shall report increased knowledge of the adverse consequences of prescription and over-the-counter drug abuse among youth.

Data Collection and Analysis

To assess the extent to which this performance objective was met, Project PATH and the evaluation team developed the Prescription and Over-the-Counter Drug Abuse Rx/OTC Drugs Health Professionals Survey that was administered by PATH staff at the conclusion of each educational workshop to health professionals. This survey consisted of five closed-ended items which asked respondents to rate the extent to which they agreed or disagreed that as a result of the workshop they increased awareness of the problems of Rx/OTC drug abuse among youth, increased knowledge of adverse consequences and methods to reduce Rx/OTC drug use among youth, and were more likely to implement methods to reduce Rx/OTC abuse among youth, using the following 4-point Likert scale: 1 = strongly disagree, 2 = disagree, 3 = agree, and 4 = strongly agree.

Project PATH revised the content of its educational workshop for health professionals about mid-way through the fiscal year, adding additional content on strategies to reduce Rx/OTC drug abuse among youth such as information on the CURES system that health professionals can use to see if patients are getting pain medications elsewhere. Because the Prescription and Over-the-Counter Drug Abuse Rx/OTC Drugs Health Professionals Survey was already developed and administered at several workshops, it was determined that the same survey would be used for all workshops conducted this fiscal year, even if it did not ask about some of the new methods that were added to the presentation. To overcome the challenge of not being able to evaluate if the new prevention strategies added to the presentation were more effective at increasing health professionals' awareness and knowledge, project staff and the evaluators decided to analyze the survey data from their first presentation type separately from survey data collected from their second, revised presentation type. Therefore, response frequencies for each survey item were calculated and presented by the two types of presentations and in aggregate in the following section.

Findings from Prescription and Over-the-Counter Drug Abuse Health Professionals Surveys

Of the 259 total Prescription and Over-the-Counter Drug Abuse Health Professionals Surveys collected in Anaheim, more than three-quarters of the respondents received the second, revised presentation (77%) and less than a quarter received the first type of presentation (23%). Based on aggregate findings from the Prescription and Over-the-Counter Drug Abuse Health Professionals Survey administered at all health professional workshops, almost all (99%) of the survey respondents agreed (indicating either "strongly agree" or "agree") that they are more aware of the problems associated with Rx/OTC drug abuse among youth, with 100% of respondents from the second presentation type in agreement, and 95% from the first presentation type in agreement (see **Table 11**). This far exceeds performance objective 9, as 99% of the health professionals educated in Anaheim reported increased awareness of the problems with Rx/OTC drug abuse among youth as a result of the workshop.

Similarly, 98% of all respondents either "strongly agree" or "agree" that they know more about the adverse consequences of Rx/OTC drugs among youth as a result of the workshop, with 98% from the second type of presentation and 95% from the first presentation type in agreement. Therefore, performance objective 10 was also met and exceeded as 98% of the health professionals educated in Anaheim reporting increased knowledge of the adverse consequences of Rx/OTC drug abuse among youth as a result of the workshop.

Table 11. Impact of Educational Workshops on Health Professionals’ Awareness, Knowledge and Behaviors by Presentation Type

<i>As a result of this workshop ...</i>	Presentation Type	Strongly Disagree	Disagree	Agree	Strongly Agree
1. I am more aware of the problems associated with Rx/OTC drug abuse among youth. (n=259)	All Presentations	1%	0%	16%	83%
	1 st Present. (n=60)	3%	2%	25%	70%
	2 nd Present. (n=199)	0%	0%	14%	86%
2. I know more about the adverse consequences of Rx/OTC drugs among youth. (n=259)	All Presentations	1%	1%	25%	73%
	1 st Present. (n=60)	3%	2%	28%	67%
	2 nd Present. (n=199)	1%	1%	24%	74%
3. I know more about drug disposal programs in Orange County. (n=259)	All Presentations	1%	2%	23%	74%
	1 st Present. (n=60)	3%	2%	33%	62%
	2 nd Present. (n=199)	0%	2%	21%	77%
4. I know more about the methods to reduce Rx/OTC drug abuse among youth. (n=259)	All Presentations	1%	1%	24%	74%
	1 st Present. (n=60)	3%	3%	27%	67%
	2 nd Present. (n=199)	0%	1%	23%	76%
5. I am more likely to implement methods to reduce Rx/OTC drug abuse among youth. (n=259)	All Presentations	1%	1%	21%	77%
	1 st Present. (n=60)	3%	2%	30%	65%
	2 nd Present. (n=199)	1%	1%	18%	80%

Note: “n” refers to the number of participants in each presentation who responded to each survey item.

In addition, 97% of all respondents agreed (either “strongly agree” or “agree”) that they know more about drug disposal programs in Orange County, 98% know more about the methods to reduce Rx/OTC drug abuse among youth, and 98% are more likely to implement methods to reduce Rx/OTC drug abuse among youth as a result of the workshop.

To further understand differences in impact between the two types of presentations for health professionals, the evaluators calculated mean scores (based on responses selected on the 4-point Likert scale of: 1 = strongly disagree, 2 = disagree, 3 = agree, and 4 = strongly agree) and compared them across the two types of workshop presentations. As seen in **Table 12**, the second presentation type had a significantly higher mean score for the items, “I am more aware of the problems associated with Rx/OTC drug abuse among youth,” “I know more about drug disposal programs in Orange County,” “I know more about the methods to reduce Rx/OTC drug abuse among youth,” and “I am more likely to implement methods to reduce Rx/OTC drug abuse among youth.” Thus, participants in the second type of presentation were in stronger agreement about the workshops’ impacts than those in the first type of presentation. While not significant, the second presentation type also had a higher mean score for the item “I know more about the adverse consequences of Rx/OTC drugs among youth” when compared to the first presentation type. Overall, the revised presentation had a greater impact than the original on increasing health professionals’ awareness, knowledge, and behaviors regarding Rx/OTC drug abuse and methods to reduce it.

Table 12. Mean scores on the Impact of Educational Workshops on Health Professionals' Awareness, Knowledge and Behaviors by Presentation Type			
	1st Present.	2nd Present.	Mean Difference
I am more aware of the problems associated with Rx/OTC drug abuse among youth.	3.62	3.86	+ .24*
I know more about the adverse consequences of Rx/OTC drugs among youth.	3.58	3.71	+ .13
I know more about drug disposal programs in Orange County.	3.53	3.75	+ .22*
I know more about the methods to reduce Rx/OTC drug abuse among youth.	3.57	3.75	+ .22*
I am more likely to implement methods to reduce Rx/OTC drug abuse among youth.	3.57	3.78	+ .21*

* indicates *p* is less than .01.

Performance Measure H: Health Professional Reinforcing Messages

- By March 31, 2012, provide two reinforcing prevention messages to those health professionals previously educated on methods to reduce prescription and over-the-counter drug abuse.

As indicated in project tracking tools and progress reports, Project PATH provided the first reinforcing message in person approximately two weeks after the educational workshops to all 259 health professional participants across 10 sites in Anaheim. Examples of materials provided in the first reinforcing message include a myth postcard, National Take Back Event fliers, and/or an educational brochure for health professionals with intervention tips. The second reinforcing message occurred two weeks after the first message (four weeks after the educational workshop) in-person to a total of 201 health professional participants across seven sites in Anaheim. The second reinforcing message included a CESAR fact sheet showing how youth obtain Rx/OTC drugs for nonmedical use or an Orange County disposal flier. PATH staff encountered difficulties in conducting the second reinforcing message with participants at UEI College as the school term ended and participants were not available to be reached through the college. Therefore, project staff made additional efforts to send the second reinforcing message to all workshop sites and tried to reach as many workshop participants as possible. Overall, 201 health professionals (78%) who attended the educational workshops received both of the reinforcing prevention messages. Therefore, the performance measure was met and exceeded as originally 50 health professionals were required to be educated in performance measure G, and therefore to receive two reinforcing messages in performance measure H.

Performance Objective 11: Health Professional Follow-up Outcomes

- By June 30, 2012, at least 50% of the follow-up health professional sample shall report having taken at least one (1) action to reduce prescription and over-the-counter drug abuse among youth.

Data Collection and Analysis

The Prescription and Over-the-Counter Drug Abuse Health Professionals Follow-Up Action Survey was developed by project staff, in collaboration with the evaluation team, in order to determine if health professionals who participated in an educational workshop have taken any action to prevent Rx/OTC drug abuse among youth since the workshop. This survey consisted of one closed-ended item which asked respondents to select from a

provided list as many actions as they have taken to prevent Rx/OTC drug abuse among youth since learning about Rx/OTC drug abuse in the workshop.

From November 2011 through June 2012, project staff administered the Prescription and Over-the-Counter Drug Abuse Health Professionals Follow-Up Action Survey to 96 previous workshop participants approximately six weeks after the initial educational workshop, except in the case of one Summit College nursing class in which the survey was administered two weeks after the initial workshop due to the school term ending. In addition to administering the follow-up survey earlier in this case, project staff also tried to overcome the difficulty of following up with previous workshop participants after the school term by administering an electronic version of the survey. Unfortunately, no previous workshop participants responded to the electronic survey. Another data collection challenge experienced by the project is that several follow-up survey respondents reported that they did not have a chance to put the information learned in the workshop into practice as they were not yet seeing patients. Therefore, project staff acknowledged that the percent of respondents who had not yet taken action may be lower than desired due to respondents' current educational and professional status, even though they expressed intent to apply the content in the future. Response frequencies were calculated by the evaluation team for each response option on the follow-up surveys collected from health professionals in Anaheim.

Findings from Prescription and Over-the-Counter Drug Abuse Health Professionals Follow-Up Action Surveys

A total of 96 health professionals who participated in educational workshop across Anaheim completed the follow-up survey. As seen in **Table 13**, 71% of the respondents took at least one action to prevent Rx/OTC drug abuse among youth since the educational workshop. Of those who responded, 70% encouraged patients to secure medications; 64% talked with patients about discarding unused, unneeded, and expired medications; 63% talked with patients about the dangers of Rx/OTC medication abuse; 54% provided patients with information to discuss Rx/OTC medication abuse with their family and friends; 53% provided a safe and open environment to talk about Rx/OTC medication; and 51% spoke to patients about monitoring Rx/OTC medications as a result of the workshop. Therefore, performance outcome 11 was met and exceeded as 71% of health professionals completing follow-up surveys took at least one action to reduce Rx/OTC drug abuse among youth.

Table 13. Impact of Educational Workshops on Health Professionals' Preventative Actions		
	Response	%
Since learning about Rx/OTC drug abuse in our workshop, which of the following actions, if any, have you taken to prevent Rx/OTC drug abuse among youth? (n=96)	Indicated at least one action	71%
	Encouraged patients to secure their medications	70%
	Talked with patients about discarding unused, unneeded, and expired medications	64%
	Talked with patients about the dangers of prescription and over-the-counter medication abuse	63%
	Provided patients with information and/or tips to discuss prescription and over-the-counter medication abuse with their family and friends	54%
	Provided a safe and open environment for patients to talk about prescription and over-the-counter medication abuse	53%
	Spoke to patients about monitoring prescription and over-the-counter medications (i.e., keeping track of medications)	51%
	Taught patients how to look for negative side effects of prescription and over-the-counter medication abuse	49%
	I have not taken any actions to reduce prescription and over-the-counter medication abuse	29%

Note: Percentages do not add to 100% as respondents were asked to check all that apply.

VII. Staff Assessment

To further inform the year-end evaluation, EVALCORP conducted staff assessments in addition to reviewing Rx/OTC Drug Abuse tracking tools and conducting data analysis on all surveys received. Project PATH staff were asked to describe the most significant accomplishments achieved throughout the 11-12 fiscal year, any surprising or unexpected outcomes that occurred, any challenges or barriers faced in implementing each performance objective and measure, how those challenges or barriers were overcome, lessons learned through the implementation of the project, and any recommendations for improvement.

Major Accomplishments and Unexpected Outcomes

The Prescription and Over-the-Counter Drug Abuse initiative experienced numerous accomplishments during the past fiscal year that included successfully educating over 250 health professionals, achieving most of their educational performance measures earlier in the fiscal year, and developing a PSA that can be used in future fiscal years. Project staff was particularly proud of their accomplishments regarding the education of health professionals. Working in the new city of Anaheim, the project was able to educate over 250 health professionals (going well beyond the 50 required) with presentations that were well-received and included new information about methods health professionals can use to reduce prescription and over-the counter drug abuse. Project staff did not expect the overwhelming success of their health professional workshops with Summit College nursing students. The workshops were so well received that Summit College may integrate the workshops into the nursing students' curriculum for the coming year.

Another major achievement was that Project PATH was able to complete its educational workshops to youth in almost all of the selected cities within the first half of the fiscal year. This allowed project staff to focus their efforts on data collection related to the media campaign in the second half of the fiscal year. While administering surveys on the impact of their media campaign, project staff found that people remembered and recognized the PSA that the staff developed with Time Warner and ran on television networks such as A&E, TLC, and BBC America. This was a major accomplishment of the project as the short and long versions of the PSA can be used in their media campaigns and educational workshops in future fiscal years.

Lessons Learned and Recommendations

Project PATH learned several lessons through the challenges they experienced while administering surveys this past fiscal year. They learned the importance of terminology in their data collection tools and approach. For instance, project staff found that instead of asking adults to take a survey they obtained greater participation by asking adults for their opinions and administering the survey verbally like an interview. In addition, they learned that language on the surveys needs to be very clear, concise, and user-friendly. Therefore, staff recommended rephrasing the wording on several survey items in the future to better customize the tools to the target populations in their communities.

VIII. Summary

During the 11-12 fiscal year, Project PATH conducted various activities to increase awareness and knowledge of prescription and over-the-counter drug abuse among youth across each of the four selected cities. For instance, Project PATH implemented a media campaign to increase awareness of the prevalence, adverse consequences, and actions to prevent Rx/OTC drug abuse among youth; conducted educational workshops to adults and youth highlighting the problems and negative consequences of Rx/OTC drug abuse among youth; and presented educational workshops to health professionals regarding the problems, adverse consequences, and methods to reduce Rx/OTC drug abuse among youth. A comprehensive evaluation of all Rx/OTC Drug Abuse quarterly progress reports, tracking documents, media campaign advertisements and marketing materials, presentations, and surveys indicated that all performance objectives and performance measures were met and/or exceeded.

Meeting Performance Objectives and Performance Measures

The Rx/OTC initiative was able to meet and/or exceed all eleven performance objectives and eight performance measures. An outcome indicator for each performance objective is provided below.

- **Performance Objective 1:** On average, 91% of the adults surveyed within the four selected cities who had seen the media campaign reported increased awareness of the prevalence of Rx/OTC abuse among youth as a result of the media campaign. This exceeds the 30% of adults surveyed within each of the four selected cities specified by the objective, with 93% of those who had seen the ad in Orange, 90% in Newport Beach, 90% in Mission Viejo, and 90% in Fullerton increasing awareness of the prevalence of prescription and over-the-counter drug abuse among youth as a result of the media campaign.
- **Performance Objective 2:** An average of 90% of the adults surveyed within each of the four selected cities who had seen the media campaign reported increased awareness of the adverse consequences of Rx/OTC drug abuse among youth as a result of the mass media campaign, with increased awareness of the adverse consequences of Rx/OTC drug abuse by city with 93% in Orange, 91% in Mission Viejo, 88% in Fullerton, and 88% in Newport Beach. This exceeds the 30% of adults surveyed within each of the four selected cities as specified by this objective.
- **Performance Objective 3:** On average, 97% of the adults surveyed within each of the four selected cities who had seen the media campaign recognized at least one appropriate action to take to prevent Rx/OTC abuse among youth. This exceeds the 30% of adults within each of the selected cities specified by the objective, with 98% in Orange, 98% in Newport Beach, 96% in Fullerton, and 94% in Mission Viejo recognizing an appropriate action they can take to prevent Rx/OTC drug abuse among youth.
- **Performance Objective 4:** On average, 98% of the adults educated within the four selected cities in aggregate reported increased awareness of the problems of prescription and over-the-counter drug abuse among youth as a result of the presentation. Thus exceeding the 70% of adults educated who were to have increased awareness as specified in the objective.
- **Performance Objective 5:** An average of 98% of the adults educated within the four selected cities in aggregate reported increased awareness of the adverse consequences of prescription and over-the-counter drug abuse among youth as a result of the presentation. This exceeds the specified 70% of adults who were to increase knowledge about adverse consequences as a result of the presentation.
- **Performance Objective 6:** Of all adult workshop participants followed-up with, 86% reported having taken at least one action to reduce prescription and over-the-counter drug abuse since the educational

workshop. This exceeds the 50% of the follow-up adult sample specified by this objective to have taken at least one action to reduce prescription and over-the-counter drug abuse.

- **Performance Objective 7:** An average of 80% of youth educated within each of the four selected cities demonstrated increased knowledge that prescription and over-the-counter drugs are not safer than street drugs, with 82% of those in Mission Viejo, 82% in Newport Beach, 80% in Fullerton, and 75% in Orange reporting this knowledge. This exceeds the objective of at least 70% of youth educated within each of the four selected cities reporting that prescription and over-the-counter drugs are not safer than street drugs.
- **Performance Objective 8:** On average, 83% of the youth educated within each of the four selected cities reported increased knowledge about the adverse consequences of prescription and over-the-counter drug abuse as a result of the presentation, with 85% of youth increasing knowledge of adverse consequences in Newport Beach, 83% in Fullerton, 83% in Mission Viejo, and 79% in Orange. This exceeds the 70% of the youth specified by this objective to have increased knowledge within each of the selected cities.
- **Performance Objective 9:** Of all health professional workshop participants in the new selected city, 99% increased awareness of the problems associated with youth abuse of prescription and over-the-counter drugs as a result of the workshop. This exceeds the specified 70% of health professionals who were to increase awareness of problems of prescription and over-the-counter drug abuse among youth.
- **Performance Objective 10:** Of all health professionals who participated in educational workshops, 98% increased knowledge of the adverse consequences of prescription and over-the-counter drugs among youth as a result of the workshop. The objective is exceeded as over 70% of health professionals educated increased knowledge of the adverse consequences of prescription and over-the-counter drug abuse among youth.
- **Performance Objective 11:** Of all health professionals followed-up with after the educational workshops, 71% reported having taken at least one action to reduce prescription and over-the-counter drug abuse among youth since the educational workshop. This exceeds the 50% of the follow-up health professional sample specified by this objective to have taken at least one action to reduce prescription and over-the-counter drug abuse.

Additionally, Project PATH was able to meet and/or exceed each of the eight performance measures. An outcome indicator or statement is provided below for each performance measure.

- **Performance Measure A:** A comprehensive media campaign plan specifying media type, timing, placement, and target audience was developed for each selected city and submitted to ADEPT on September 15, 2011. This meets the requirements of the measure and the due date.
- **Performance Measure B:** A media campaign was conducted in each of the four selected cities to increase public awareness of the prevalence, adverse consequences and appropriate action adults can take to prevent prescription and over-the-counter drug abuse among youth. The media campaign in each city featured “Good Meds, Bad Behavior” advertisements, employed at least four different types of media, and exposed the target audience to at least one media component during a six month period; thus meeting the requirements of this measure.

- **Performance Measure C:** During the 2011-12 fiscal year, a total of 438 adults were educated within the four selected cities in aggregate on prescription and over-the-counter drug abuse among youth, with 374 of these adults being educated from August 2011 through February 2012. This exceeds the 200 adults who were to be educated across the four selected cities in aggregate by February 29, 2012.
- **Performance Measure D:** Project PATH followed up with a total of 183 adults at least 30 days after they had participated in educational workshops in order to assess actions they had taken to prevent prescription and over-the-counter drug abuse since the workshop. This exceeds the 100 adults specified in the measure to receive a follow-up.
- **Performance Measure E:** A total of 1,527 youth across the four selected cities were educated about the concept that Rx/OTC drugs are not safer than street drugs, with 570 educated in Fullerton, 412 in Orange, 275 in Newport Beach, and 270 in Mission Viejo; thus exceeding the required 225 youth who were to be educated within each of the four selected cities as specified by the measure.
- **Performance Measure F:** A total of 1,527 youth across the four selected cities were educated on the adverse consequences of Rx/OTC drug abuse, with 570 educated in Fullerton, 412 in Orange, 275 in Newport Beach, and 270 in Mission Viejo. This exceeds the specified 225 youth who were to be educated within each of the four selected cities.
- **Performance Measure G:** During the 2011-12 fiscal year, a total of 259 health professionals were educated within a new selected city on methods to reduce prescription and over-the-counter drug abuse among youth, with 175 of these health professionals being educated from October 2011 through February 2012. This exceeds the 50 health professionals who were to be educated in the new selected city by February 29, 2012.
- **Performance Measure H:** Project PATH provided two reinforcing prevention messages to 201 health professionals previously educated on methods to reduce prescription and over-the-counter drug abuse, with the first reinforcing message approximately two weeks after the workshop and the second reinforcing message two weeks after the first reinforcement message. This meets the performance measure.

Conclusion

The Prescription and Over-the-Counter Drug Abuse initiative achieved several major accomplishments during the 11-12 fiscal year such as educating over 250 health professionals in a new city, completing educational workshops to youth in most selected cities earlier in the fiscal year, meeting their media campaign data collection goals, and developing PSAs that ran on network television and can be used in future fiscal years. Lessons learned by project staff from their experiences in the 11-12 fiscal year included the importance of wording on surveys and in their approaches to data collection. Accordingly, project staff made several recommendations to better customize tools for the coming fiscal year to their targeted populations.

Overall this past fiscal year, Project PATH has successfully educated adults, youth, and health professionals about the problems, adverse consequences, and actions to reduce prescription and drug abuse among youth. The project also created and implemented a comprehensive media campaign with new materials and collaborative partners. Finally, project staff persisted in their data collection efforts in order to overcome challenges and to ultimately meet and/or exceed all of the Prescription and Over-the-Counter Drug Abuse initiative's performance objectives and performance measures.