

Note: Rick Howard indicated in a phone conversation on August 17, 2015 that an application could be submitted even though the state substance abuse agency is not providing the nomination.

**2015 National Exemplary Awards for  
Innovative Substance Abuse Prevention Programs, Practices and Policies  
APPLICATION COVER SHEET  
(INCLUDE WITH APPLICATION)**

**1. Has this intervention been submitted for an Exemplary Award in previous years?** [Circle one]

Yes

No

**2. What is the primary target for this program, practice or policy?** [Circle one]

Individual

School-Based

Family/Parent

Peer/Group

Workplace

Environmental/Community-Based

Other

If Other, explain: Prescribers and pharmacists who prescribe/dispense controlled substances

**PROGRAM INFORMATION**

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I have reviewed the information contained in this application and certify that it is accurate, to the best of my knowledge.

Clare Desrosiers

9/1/2015

Program Director Signature

Date

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[Signature]

Nominating Agency Signature

9/1/15

Date

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## Abstract

### **Program Summary**

Diversion Alert (DA) is an innovative, statewide program in Maine that links prescribers, pharmacists, and law enforcement in their efforts to confront prescription drug abuse. It is the only program of its kind in the Nation. DA provides monthly drug arrest reports to prescribers and pharmacists and maintains an online, searchable drug charge database which is also accessible to health care professionals. DA data is a source of information to identify patients at risk for overdose, in need of addiction treatment, or engaged in illegal prescription drug distribution. By providing this information, the program tackles an underlying cause of prescription drug abuse (access through prescribers) and serves as a catalyst for addressing two major consequences of the problem – addiction and crime. This approach to prevention of substance abuse and illegal diversion targets the informed health care provider as an important locus for change and prevention.

### **Methodology**

Study 1: A comprehensive quasi-experimental pre/post study with comparison groups was conducted in 2013 and 2014 to answer evaluation research questions. The evaluation examined the extent to which Diversion Alert has achieved its aims, compared to two equivalent states that do not have the program. Over 2000 respondents participated in the evaluation, the majority of which were prescribers in Maine, New Hampshire, and Vermont

Findings from Study 1 provide powerful evidence highlighting the success of DA in achieving its intended outcomes – (1) providing drug arrest data to health care providers so they can identify and respond to patients at risk for overdose, in need of treatment, or engaged in illegal prescription drug distribution; and (2) increasing use of prescribing practices which prevent prescription drug abuse and diversion.

Study 2: A population-based, observational study using retrospective data from DA and Maine's prescription drug monitoring program (PDMP) was conducted in 2015. The objective of the study was to describe PMP utilization trends of individuals arrested for controlled substance prescription trafficking in Maine in 2014.

Findings from Study 2 provide evidence that Diversion Alert data delivers new, actionable information to prescribers and pharmacists distinct from the data in PDMPs, thereby completing the picture of who is abusing and diverting prescriptions.

## Program Narrative

### A. Philosophy

#### Mission Statement:

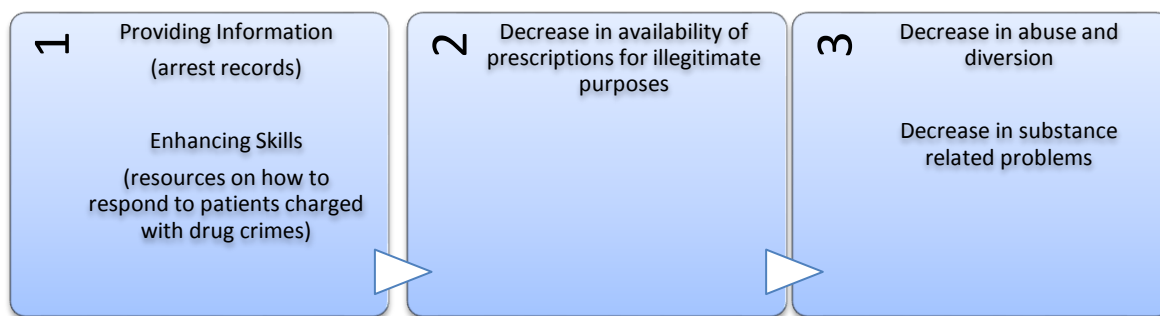
To address Maine's prescription drug abuse epidemic by providing access to drug arrest data for health care providers so that they can identify and respond to patients engaged in illegal drug related activities.

#### Philosophy/Conceptual Framework of Diversion Alert:

In underage drinking prevention, research has affirmed that providing information and resources to retailers (through Responsible Beverage Service training, signage and policy changes) helps reduce underage access to alcohol through retail stores and can also be an effective method for decreasing alcohol related problems. The Diversion Alert program applies and expands the theory supporting that approach to the problem of prescription drug abuse. Prescribers and pharmacists are given information and resources which equip them to more effectively identify and respond to patients abusing or diverting prescriptions. This information makes it easier to determine whether patients have a legitimate need for controlled substance prescriptions and thus informs prescribing practices. By preventing or limiting availability of prescription drugs to these patients, other substance abuse related problems can be reduced. Like RBS programs, Diversion Alert distributes educational resources to all participants with guidance on how to respond to patients abusing or diverting prescriptions. In this way, DA accomplishes two major purposes:

1. reduction of access through health care providers to prescription drugs for individuals who are seeking to use them for illegitimate purposes; and
2. providing guidance and education to physicians and other prescribers on how to respond to patients who are abusing or diverting pharmaceuticals.

A picture of the theory behind the program is included below:



#### No Illegal or High Risk Use Message

Diversion Alert's mission and philosophical framework reflect a "no illegal or high risk" use message because the program's focus is on providing information to health care providers so that they can more effectively identify and respond to prescription and illegal drug abuse. The long term goal of the program is to reduce prescription drug abuse and diversion, both of which are illegal and high risk.

## B. Needs Assessment

### Diversion Alert History

In 2007, Aroostook Substance Abuse Prevention (ASAP) Coalition formed a countywide committee of stakeholders to plan and conduct a comprehensive community needs assessment as preparation for development of a five-year substance abuse prevention strategic plan for Aroostook County, Maine. Over a period of six months, the committee helped complete the assessment - which included a review of epidemiological data (substance abuse treatment data, substance poisonings, youth and adult use patterns etc.), collection of new information from focus groups, distribution of surveys to community members and health care providers, and completion of community readiness and resource assessments. Findings from the needs assessment highlighted a significant prescription drug abuse problem in Aroostook County and indicated that:

1. prescribers were a primary source of prescriptions for individuals who were abusing and diverting controlled substances;
2. a significant portion of prescribers in the County did not consider prescription drug abuse to be a problem (this finding suggested they were not aware of patients abusing or diverting prescriptions);
3. existing resources for addressing prescription drug abuse (Maine's PDMP in particular) were not user friendly;
4. there were no regularly scheduled medical training sessions in the County which addressed prescription drug abuse and diversion; and
5. law enforcement and medical professionals were frustrated with one another and were not working together to address prescription drug abuse.

As the Coalition worked to develop strategies to address prescription drug abuse, it became clear from discussions with stakeholders that changing the perceptions and prescribing behaviors of medical professionals would be very difficult. A more effective approach would be to become a resource for prescribers in the County and thereby fill some of the needs revealed by the assessment:

1. Increase awareness of patients abusing or diverting prescriptions so that medical professionals could more effectively respond to and treat patients struggling with addiction;
2. Increase awareness of the magnitude of prescription drug abuse as a means to increase health care providers' readiness to change prescribing behaviors.
3. Deliver a resource that is easy to use;
4. Increase access to educational resources about responding to prescription drug abuse and diversion; and
5. Develop a strategy to link health care providers and law enforcement in their efforts to tackle prescription drug abuse and diversion so that both groups could be more successful in efforts to curb the problem.

Diversion Alert was launched in Aroostook County in 2009. It provided monthly, unsolicited drug arrest reports to registered prescribers and pharmacists in the County. The reports included basic arrest information submitted to Diversion Alert by law enforcement agencies (name, date of birth, sex, community of residence, drug charge, date of charge, law enforcement agency

involved in arrest) along with a booking photo. A key component of the program was that it was delivered to registered medical professionals every month so program participants did not have to remember a password and remember to access the data. The program served as a link between enforcement and medical personnel by virtue of the data it provided but also because it encouraged medical professionals to contact law enforcement agencies if they had additional questions about specific arrest records. Finally, ASAP Coalition (which managed Diversion Alert) sponsored semi-annual educational sessions about how to more effectively respond to prescription drug abuse and diversion.

From 2009-2012, Diversion Alert distributed outcome surveys annually to program participants. Though the total number of survey participants was small (n=121), the findings were promising. Both the findings, coupled with testimonies from participants, led to state-funded expansion of the program to all of Maine in 2013.

### **2013 Epidemiological Data that Led to Statewide Expansion**

For the past fifteen years, Maine has wrestled with a significant prescription drug abuse and diversion problem. In 2013, multiple epidemiological data sources pointed to the need to expand Diversion Alert to all of Maine. At that time, 38% of arrests made by the Maine Drug Enforcement Agency were pharmaceutical related. Moreover, 34% of substance abuse treatment admissions in Maine in 2012 were for opioid addiction. According to a 2011 CDC report, Maine's drug overdose death rate in 2010 was 10.4/100,000 population.<sup>1</sup> Since 2008, approximately 90% of the drug overdose deaths in Maine were pharmaceutical related (see graphs below),<sup>2</sup> though heroin overdose deaths began to increase in 2012. The sharp rise in opioid overdose deaths closely paralleled an equally sharp increase in the prescribing of these drugs. Opioid pain reliever sales in the United States quadrupled from 1999 to 2010 (see map below).<sup>3</sup> In 2010, Maine had one of the highest rates of kilograms of prescription painkillers dispensed per capita. So narcotics were very accessible through Maine's health care system.

Given the significance of Maine's problem, there was a need to reduce access to prescription drugs for illegitimate purposes. A 2014 study published by the CDC indicates that physicians are the leading source of prescription painkillers for individuals at high risk for painkiller overdose (see pie chart below).<sup>4</sup> Preliminary findings from the small evaluation in Aroostook County indicated that Diversion Alert would reduce illegitimate access to prescription drugs through health care systems by giving physicians a source of information to identify patients in need of addiction treatment or engaged diversion, by increasing health care providers awareness of the magnitude of prescription drug abuse in their communities, and by increasing use of prescribing practices that prevent and address prescription drug misuse.

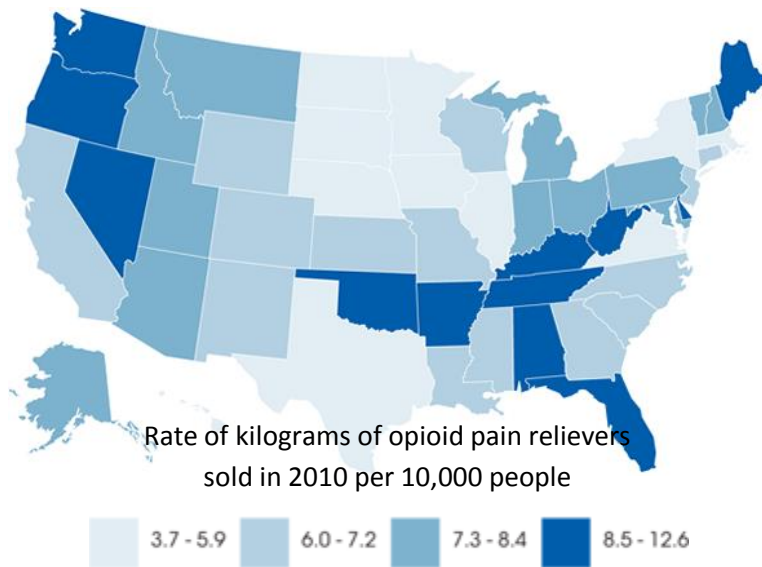
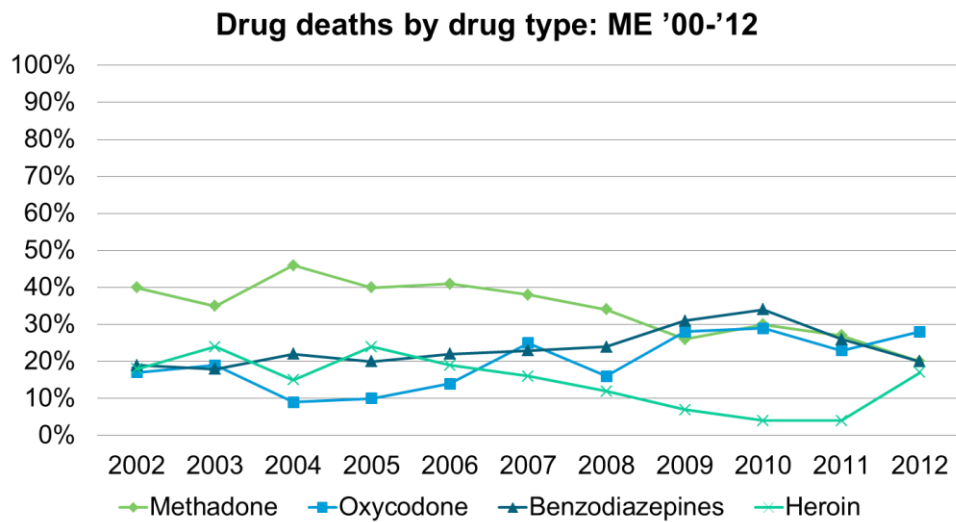
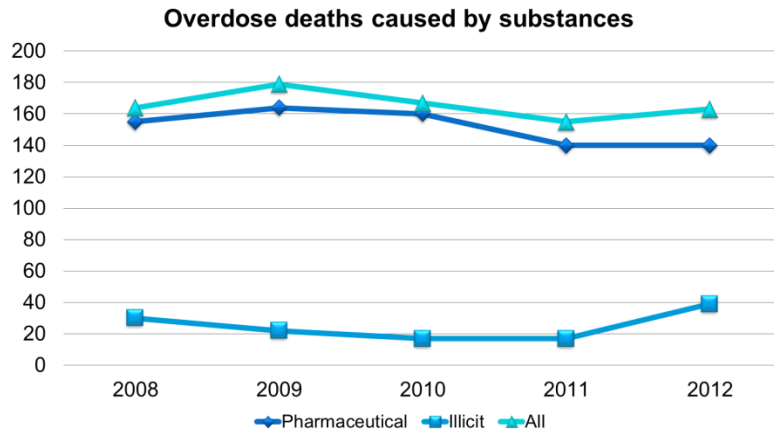
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<sup>1</sup> Centers for Disease Control and Prevention. Policy Impact: Prescription Painkiller Overdoses. Atlanta, GA: US Department of Health and Human Services; 2011.

<sup>2</sup> Maine Office of Substance Abuse and Mental Health Services. Substance Abuse Trends in Maine: State Epidemiological Profile 2013. South Portland, ME: Hornby Zeller Associates, Inc.; 2013.

<sup>3</sup> Centers for Disease Control and Prevention. Policy Impact: Prescription Painkiller Overdoses. Atlanta, GA: US Department of Health and Human Services; 2011.

<sup>4</sup> Jones, CM, Paulozzi, LJ, Mack, KA. (2014). Sources of Prescription Opioid Pain Relievers by Frequency of Past-Year Nonmedical Use United States, 2008-2011. JAMA Intern Med. 174(5):802-803.



Data source: Centers for Disease Control and Prevention, National Center for Injury Prevention and Control, Division of Unintentional Injury Prevention 2011.



## **Planning Processes**

Prior to statewide expansion in 2013, Maine's Attorney General held a prescription drug abuse summit in 2011 which involved over 200 law enforcement, treatment, prevention and health care professionals. The summit included review of existing data highlighting the prescription drug abuse problem in Maine and discussion in break out session of resources needed by treatment, prevention, medical and law enforcement professionals to more effectively address the problem. One of the needs identified by medical professionals was expansion of Diversion Alert statewide so that they could have access to arrest records to inform their prescribing decisions.

In 2012, a group of stakeholders was convened by the Attorney General to plan expansion of Diversion Alert. The planning process included assessments of existing programs similar to Diversion Alert and potential barriers to use of Diversion Alert by medical professionals. The group also identified goals and objectives to accomplish within the first two years of program expansion. These included development and distribution of educational resources to participants about how to respond to patients charged with drug crimes and completion of a large scale outcome evaluation.

In 2013, a statewide Advisory Board consisting of medical professionals, law enforcement personnel, the State Office of Substance Abuse, attorneys, and public health professionals was assembled to advise Diversion Alert. The Board assisted in the revision of the survey instrument used to evaluate Diversion Alert previously and also helped to develop the educational resources for medical professionals. With input from the Advisory Board, a contracted evaluator finalized the survey instrument and developed the evaluation plan for Diversion Alert. A quasi-experimental pre/post study with comparison groups would be conducted in Maine, New Hampshire and Vermont with baseline survey data to be collected in 2013 and post-survey data in 2014.

## **Involvement of the Target Population**

Medical professionals, the target population for Diversion Alert, were involved in development of the program prior to its inception in 2009. In 2008, a small planning committee for Diversion Alert had a nurse practitioner who spoke on behalf of medical professionals. The planning committee reported to ASAP Coalition members which included hospital staff, law enforcement, and treatment and prevention professionals. The statewide planning committee convened in 2012 and expanded in 2013 to form an Advisory Board included four medical professionals – a medical doctor, a nurse practitioner, a dentist and a pharmacist. To ensure the program is responsive to medical professionals' needs, questions pertaining to program improvement were included in the 2014 post-survey and will be included in surveys that are distributed in 2015.

## **C. Population Served**

### **Target population**

The target population served by Diversion Alert is health care providers licensed to prescribe or dispense controlled substances in Maine. Maine has approximately 6,512 medical practitioners licensed to prescribe controlled substances and 1,210 pharmacists licensed to dispense controlled substances.

The primary population for Diversion Alert is health care providers who do the bulk of controlled substance prescribing to patients with non-malignant pain in rural areas (Family and



General Practitioners, Internists, Pediatricians, ER Physicians, Physician Assistants and Pharmacists). These are the prescribers who are most likely to have patients abusing or diverting prescriptions. The secondary target population is dentists, surgeons, psychiatrists, and pharmacists.

In Maine, there is a shortage of health care providers resulting in a significant demand for care that puts pressure on providers to do more in less time. In recent years, there has also been growing pressure both inside and outside the medical community to implement effective strategies to reduce prescription drug abuse. Celebrity deaths, widespread media coverage of prescription drug abuse, and an increasing number of prescription related deaths in Maine seem to have contributed to health care provider concern about patient deaths due to prescription drug overdose. As a result of these factors, the demand within the health care industry for readily accessible and easy-to-use tools and resources to assist health care providers in prescribing decisions has increased.

### **Recruitment and Retention of Participants**

The following strategies were used to recruit health care providers to participate in Diversion Alert:

1. Promotion by statewide medical associations in articles and via in-person training sessions;
2. Direct mailing to actively licensed medical professionals;
3. Training sessions at hospitals and professional conferences.

After only two years in operation statewide, Diversion Alert has already recruited 25% of actively licensed medical professionals in Maine as program participants. Very little effort has been needed to retain participants. Over the past two years, no more than ten registrants have chosen to stop receiving monthly drug arrest reports. The majority of those individuals chose to do so because they were no longer practicing medicine in Maine.

### **Cultural Competency**

Diversion Alert ensures its program is culturally competent through inclusion of Advisory Board members in program oversight and development. Diversion Alert is not a direct service program so does not interact with its target audience on a daily basis. Cultural competency for Diversion Alert consists in ensuring that the resource the program provides is useful and easy to understand by its target audience. While there is widespread ethnic diversity within the health care provider community, all providers experience the pressures of having to determine whether to prescribe or dispense a controlled substance to a patient in the small amount of time given to them to do so during their overfull days. Diversion Alert is especially sensitive to this reality and works to ensure that the resource it provides is timely, accurate, easy to use, and easy to understand. The program has asked for feedback on how to more effectively serve providers and has made changes to its resources based on health care provider suggestions. It is this openness to suggestions and willingness to change that ensures the program will be culturally competent.

## **D. Building Capacity**

### **Relationship to Prevention Strategies and Systems in Maine**

In Maine, the bulk of substance abuse prevention systems are housed under the umbrella of two state departments – the Maine Office of Substance Abuse and Mental Health Services (ME SAMHS) and the Maine Healthy Maine Partnerships. The former is a statewide network of community based public health coalitions which receive state funding and implement both substance abuse and public health prevention strategies. The ME SAMHS contracts substance abuse prevention work to Healthy Maine Partnership Coalitions. While a statewide program, Diversion Alert is not housed under either of these larger entities. Rather, Diversion Alert is a non-profit organization. This separation is necessary due to state and Federal regulations regarding the release of arrest records to the public. In spite of the separation, Diversion Alert has worked to stay connected to Maine's prevention systems by including a representative from ME SAMHS on its Advisory Board and by staying connected to the prevention community through participation in conferences and training events.

Maine's overall prescription drug abuse prevention strategy focuses on increasing prescriber use of tools and resources that help to reduce prescription drug abuse and diversion. Diversion Alert fits into this strategy because it is one of several tools that can be used by health care professionals.

### **Use of Collaboration and Linkages**

Diversion Alert collaborates with multiple organizations in its efforts to promote the program and to expand research about the program's outcomes. For example, Diversion Alert collaborates with medical associations in Maine to educate prescribers about how to respond to patients charged with drug crimes and to educate about how to use Diversion Alert. The program has also linked with researchers at the University of New England, Bowdoin College and Husson University. These researchers are analyzing Diversion Alert arrest data to identify patterns of drug abuse over time. Most recently, Diversion Alert has been corresponding with researchers at the Federal Centers for Disease Control and Prevention who are also using Diversion Alert data to track drug abuse trends.

### **Community Outreach and Grassroots Participation**

Due to the nature of Diversion Alert, community outreach to the public is not done. Outreach within the target population is done through promotional mailings, attendance at medical conferences in Maine, and through promotion by medical associations. Grassroots promotion for Diversion Alert consists of health care providers telling other providers about the program. Promotion via word of mouth has helped to recruit new participants in the program.

## **E. Strategic Planning**

### **Program Goals and Objectives**

The goal of Diversion Alert is to decrease prescription drug abuse and diversion by informing health care providers about illegal prescription drug activities so that they can (1) identify patients in need of treatment for substance addiction or engaging in illegal diversion of prescription drugs and (2) implement best practices for addressing prescription and illegal drug abuse and diversion.

In order to reach this goal, Diversion Alert is implementing objectives which focus on increasing the number of providers using the program, improving how the program functions, garnering additional funds to help sustain the initiative, and building the evidence for the program's outcomes as a means to establish Diversion Alert as an evidenced based program.

### 2015-16 Objectives in Relation to Needs Assessment

Objective	Need Identified in Needs Assessment
By June 2016, register 35% of prescribers and pharmacists in Maine to participate in Diversion Alert.	Increase awareness of patients abusing or diverting prescriptions so that medical professionals could more effectively respond to and treat patients struggling with addiction.
On a monthly basis, provide Diversion Alert drug arrest reports to registered prescribers, pharmacists and law enforcement agencies in Maine's eight public health districts.	<p>Increase awareness of the magnitude of prescription drug abuse as a means to increase health care providers' readiness to change prescribing behaviors.</p> <p>Develop a strategy to link health care providers and law enforcement in their efforts to tackle prescription drug abuse and diversion so that both groups could be more successful in efforts to curb the problem.</p>
On an ongoing basis, distribute tip sheets on how to respond to patients charged with drug crimes to all new registrants and to prescribers who participate in Diversion Alert training sessions.	Increase access to educational resources about responding to prescription drug abuse and diversion.
By June 2016, achieve at least 50% drug arrest data submission rate for all prosecutorial districts.	<p>Increase awareness of the magnitude of prescription drug abuse as a means to increase health care providers' readiness to change prescribing behaviors.</p> <p>Develop a strategy to link health care providers and law enforcement in their efforts to tackle prescription drug abuse and diversion so that both groups could be more successful in efforts to curb the problem.</p>
By March, 2016, complete technological updates to Diversion Alert to ensure the system remains user-friendly.	Deliver a resource that is easy to use.
By June, 2016, ensure program sustainability through placement of Diversion Alert as a line item in the state budget, a distinct appropriation, or other avenues.	Decrease prescription drug abuse and diversion
By March, 2016, complete all requirements for establishment of Diversion Alert as an evidence-based program.	Increase awareness of patients abusing or diverting prescriptions so that medical professionals could more effectively respond to and treat patients struggling with addiction.
By February, 2016, complete analysis of post surveys distributed in 2015.	Increase health care provider use of best practices for addressing prescription/ illegal drug abuse.

Diversion Alert is state funded program which has a distinct annual appropriation for fiscal year 2015-2016. To ensure program sustainability, staff will be working with state legislators and the Governor's Office to place Diversion Alert as a line item in the state budget for the next fiscal year and beyond.

## **F. Implementation**

### **Program Operation**

Diversion Alert addresses the prescription drug abuse epidemic in Maine with free, innovative tools that provide access to drug arrest data for health care providers so they can identify and respond to patients engaged in illegal drug related activities. This data is distinct from Maine's PDMP, which contains confidential patient records detailing controlled substances dispensed to patients from pharmacies. Diversion Alert data consists of public arrest records compiled into monthly reports that can be easily reviewed by health care providers. In addition to monthly reports, Diversion Alert maintains an online, searchable drug charge database and distributed educational resources to assist in responding to patients charged with drug crimes.

Every month, law enforcement agencies in Maine submit drug arrest data to Diversion Alert via email. The data is entered into Diversion Alert's online drug arrest database which generates monthly drug arrest reports by prosecutorial district and statewide. Completed reports are emailed to Diversion Alert registrants.

Law enforcement agencies submit data voluntarily to Diversion Alert. All agencies which are responsible for the vast majority of drug arrest in Maine already submit data to Diversion Alert. A portion of smaller, less active agencies do not yet submit data. One of the program objectives is to increase the number of smaller agencies submitting data.

In June, 2015, 25% of actively licensed prescribers and pharmacists in Maine were registered with Diversion Alert. In order to increase the impact of the program, Diversion Alert will focus a significant portion of efforts to increase the number of registered health care providers. This will be accomplished through direct mailing, training, and social media.

Another major piece of Diversion Alert's activities includes program evaluation. Diversion Alert has been provided with state funds because Maine's legislature and governor were impressed by its outcomes. In order to continue to receive state funds, Diversion Alert has to increase the number of providers using its program and also has to continue to document its outcomes. In 2015, a post-survey will be distributed to individuals who registered with DA in 2014.

### **Innovation**

Diversion Alert is the only program of its kind in the Nation. It is innovative because it links prescribers, pharmacists, and law enforcement in their efforts to confront prescription drug abuse. Existing prescription drug abuse prevention strategies do not link law enforcement and health care professionals.

Diversion Alert is also innovative because it applies and expands upon a proven approach for addressing underage access to alcohol through retail outlets to the problem of prescription drug abuse. This approach to prevention of prescription drug abuse and diversion targets the informed health care provider as an important locus for change and prevention.

## Ability to Affect Change

See evaluation section.

## Infrastructure/Support System

Diversion Alert is a 501(c) 3 non-profit organization which employs two staff members under the oversight of a Board of Directors and statewide Advisory Board. The Advisory Board includes members of medical and law enforcement associations which are able to advise and support the work of the program.

## Adaptation to Other Sites

Diversion Alert can be easily replicated in other states. The database can track arrests in any state and the simplicity of program operation lends itself to replication in other locations.

## G. Evaluation

A comprehensive quasi-experimental pre/post study with comparison groups was conducted in 2013 and 2014. The purpose of the evaluation was to determine the extent to which program outcomes were achieved in Maine as compared to states without Diversion Alert. Due to their rural geography and resulting similarities in rural medical practice, New Hampshire and Vermont were selected as comparison states. Vermont has a Prescription Monitoring Program (PMP) and New Hampshire had PMP legislation but no operational program at the time of survey distribution, allowing us to examine the comparisons between Maine, which is the only state with Diversion Alert, and the other two states, and to compare states with and without PMPs. The Provider Awareness and Practice Survey, hosted on Survey Gizmo, was distributed at two intervals (Summer/Fall, 2013 and Summer/Fall 2014) through bulk mailings to actively licensed prescribers and pharmacists in all three states. Mailing lists were obtained through professional associations and/or through databases maintained by states.

## Respondents

1,811 respondents participated in the 2013 pre-evaluation while 782 respondents participated in the 2014 post-evaluation. The majority were prescribers in Maine, New Hampshire, and Vermont. The first table presents a summary of the surveys completed for each state for pre and posttest. Posttest respondents and their professional grouping are presented in the second table.

Surveys completed by state

State	# completed pre-surveys	# completed post-surveys
Maine	862	202
New Hampshire	580	385
Vermont	369	195

Post-test respondents and professional grouping by state

	Maine	New Hampshire	Vermont
Prescribers	81.7% (n=165)	76.1% (n=293)	73.9 % (n=144)
Pharmacists	9.9% (n=20)	20.3% (n=78)	22.6% (n=44)
Medical Office Staff*	4% (n=8)	.5% (n=2)	.5% (n=1)
Other*	4.5% (n=9)	3.1 (n=12)	3.1% (n=6)

\*omitted from analysis

## Major Outcomes, Impacts and Changes

### *Awareness of the Problem of Prescription Drug Abuse/Diversion*

All three states had a high degree of awareness of prescription drug abuse at pre-test, and all states demonstrated an increase on awareness on the post-test. Table 4 presents pre and post-test outcomes illustrating that awareness increased in all three states. ***Maine had the highest percentage of awareness among the three states on both pre and post-test. Vermont scores increased more than the other two states.***

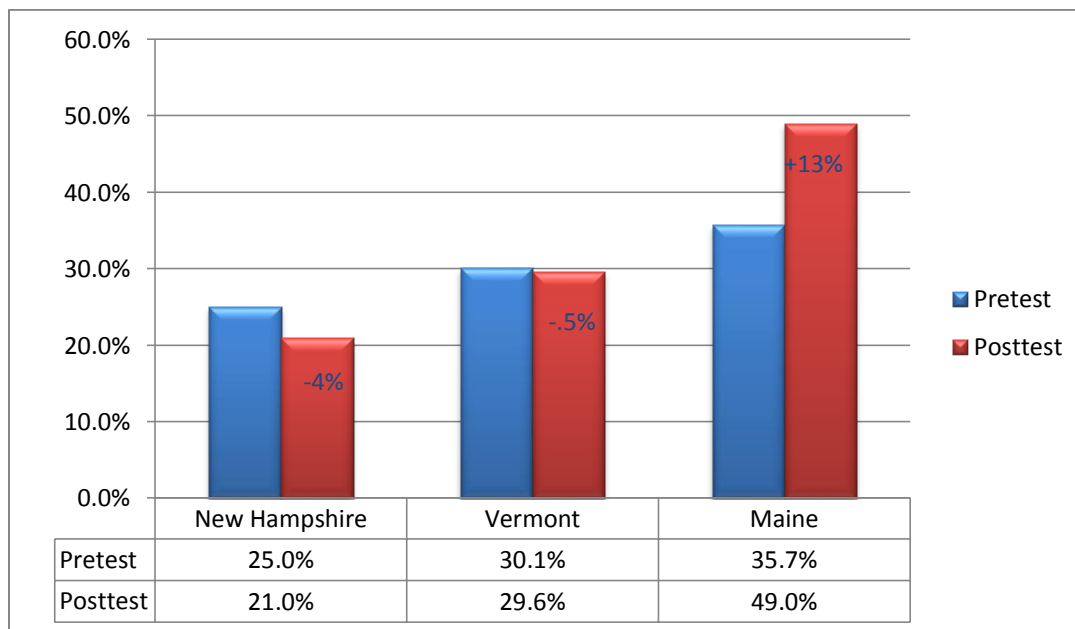
% of respondents answering “yes” to the item:  
There is a prescription abuse/diversion problem in my local area.

	Pre	Post	Change
New Hampshire	74%	76%	+2%
Vermont	78%	95.6%	+17.7%
Maine	87%	98%	+11%

### *Awareness of Patients Illegally Diverting or Possessing Prescriptions*

The second outcome tested was the change in health care provider awareness of patients in their care arrested for prescription drug possession or diversion. Percentages for each state are provided below.

% of respondents answering yes to the item- In the past six months, I have become aware of patients in my care arrested for prescription drug possession or diversion.



While New Hampshire and Vermont showed minor decreases on this item, ***Maine reported an increase of just over 13% compared to pretest findings. Compared to other states, Maine also demonstrated a significantly higher degree of awareness on this variable at both testing intervals ( $\chi^2 = 52.7, p=000$ ). Compared to prescribers, pharmacists in all three states became significantly more aware of patients who were involved in illegal activity than prescribers. The***

*small probability of the Chi Square test affirmed the findings as significant, not change occurrences. ( $\chi^2 = 34.6$ ,  $p = .000$ ).*

### *Change in Health Care Provider Clinical Behaviors*

The third outcome examined was the extent to which Diversion Alert facilitated a change in health care provider clinical behaviors or practices with individuals they discover illegally possessing or diverting prescriptions. \*Finding is significant if  $p < .05$

t-tests for dependent samples: I communicate with health care providers who share a patient's treatment with me.

	Pre-test mean/SD	Post-test mean/SD	P*
New Hampshire	3.01/.76	3.05/.8	.000*
Vermont	3.03/.35	3.04/.8	.001*
Maine	2.68/.6	3.04/.7	.000*

Rating scale 1=never, 2=sometimes, 3=A lot, 4=All the time

t-tests for dependent samples: I communicate with pharmacists who fill prescriptions for my patients.

	Pre-test mean/SD	Post-test mean/SD	P*
New Hampshire	2.42/.78	2.53/.04	.000*
Vermont	3.03/.8	2.66/.8	.000*
Maine	2.62/.77	2.75/.76	.000*

Rating scale 1=never, 2=sometimes, 3=A lot, 4=All the time

All states reported an increase in provider communication between pre and post-testing **with Maine showing the greatest improvement.**

### *Prescriber Change in Specific Behaviors*

The graphs below presents the means and pre-posttest comparisons for items testing prescribers' change in behaviors. All items were rated on a scale of 1-4 (1=never, 4= all of the time), with ascending scores indicating more frequent use of the technique.

Means and t-test results on items testing changes in provider behavior

Item	Pre-test Mean			Post-test mean		
	Maine	New Hampshire	Vermont	Maine	New Hampshire	Vermont
I use patient agreements (or contracts) for patients who are prescribed ongoing therapy with narcotics.	3.06	2.8	2.81	3.31	2.86	2.84
I use patient agreements (or contracts) for patients who are prescribed ongoing therapy with controlled substances other than narcotics.	2.76	1.87	2.08	2.86**	2.08	2.16
I use a screening tool to determine a patients' history of substance	2.4	1.89	2.08	2.39**	2.0	2.09



abuse or addiction.						
I order urine toxicology screens on new patients prior to prescribing a controlled substance.	2.63	1.76	2.06	2.26**	1.71	1.87
I order random urine toxicology screens on existing patients who are prescribed a controlled substance.	2.71	2.05	2.34	2.5	2.04	2.19
I speak to patients in my care about my knowledge of their prescription possession or diversion arrest.	2.82	2.33	2.49	2.71	2.34	2.52
I share information with colleagues about how best to respond to patients I discover involved in illegal drug related activities.	2.74	2.42	2.63	2.75	2.51	2.57
I share information with colleagues about use of best practices for prescribing controlled substances.	2.7	2.29	2.45	2.64**	2.33	2.37
I consult my state's Prescription Monitoring Program.	2.5	1.43	2.39	3.14	1.56	2.79
If a patient in my care were arrested for a prescription drug related crime, I would stop prescribing controlled substances to him/her.	3.38	3.65	3.61	3.51***	3.64*****	3.32
Stopped prescribing for patients who have been arrested	3.28	3.3	3.51	3.54***	3.68	3.56
Do not change meds for patients who have been arrested	2.79	2.65	1.38	1.32***	1.28	1.27
Decrease controlled substances for patients who have been arrested	3.15	3.13	2.23	2.19**	2.24	2.28
Refer for addiction counseling	3.12-3.19			3.2***	3.19	3.16
Discharge patients who have been arrested	2.93	2.79	1.98	1.8*** ↓	2.12 ↓	1.76 ↓

\*\* Significant difference between Maine both other states on One-way ANOVA

\*\*\*Significant difference between Maine and New Hampshire on One-Way ANOVA

\*\*\*\*Significant Difference between Maine and Vermont on One Way Anova

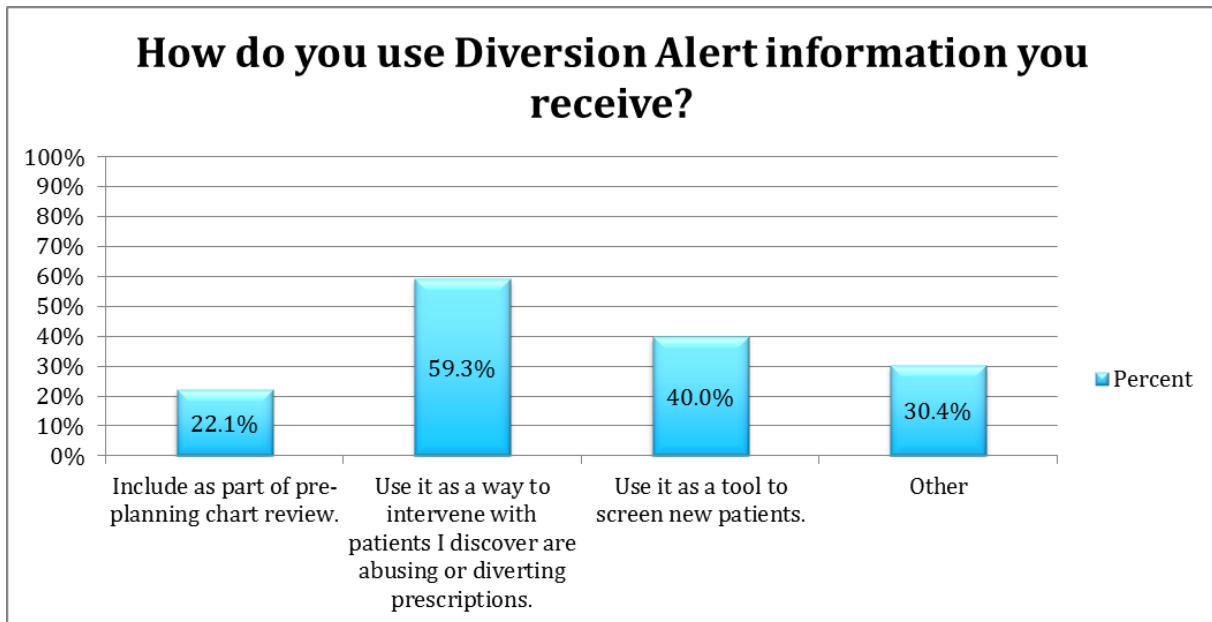
\*\*\*\*\*Significant Difference between Vermont and New Hampshire on One Way Anova

Provider behavior in each state and compared among states supports the use of DAP information for clinical and prescribing decision making. In Maine, significant improvements were realized on communication and collaboration with patients through contracts, on screening in order to garner additional information to guide prescribing and treatment decisions, and on more conservative prescribing procedures to limit illegal use and diversion for patients who have been arrested. Moreover, Maine providers decreased significantly in discharging patients who have

been arrested suggesting that they seek to provide needed health care to all patients while also attending to alternative prescribing for those who have been involved in illegal substance activity.

### *How is Diversion Alert used?*

Responses to the evaluation question about how Diversion Alert is used are below.



### *Attentiveness to Prescribing*

The graph below presents the percentage of respondents attributing improved attentiveness to prescribing resulting from Diversion Alert. **84% of respondents reported that Diversion Alert has increased their attentiveness to prescribing practices.**

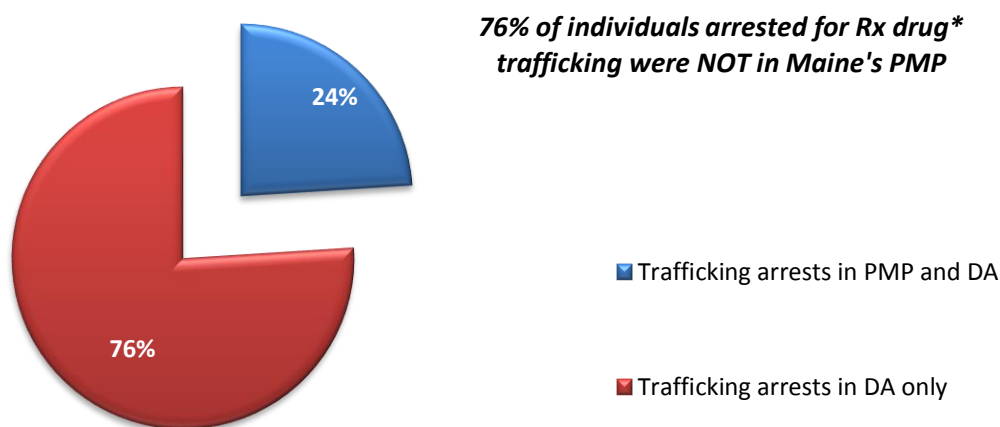
Percentage of respondents attributing improved attentiveness to prescribing resulting from Diversion Alert



### University of New England Study

A population-based, observational study using retrospective data from DA and Maine's prescription drug monitoring program (PDMP) was conducted in 2015. The objective of the study was to describe PMP utilization trends of individuals arrested for controlled substance prescription trafficking in Maine in 2014. Researchers assigned an identification number to individuals in the Diversion Alert database who were charged with trafficking controlled substance prescriptions. The individuals were matched to individuals who had a record of controlled substances dispensed in Maine's Prescription Monitoring Program and then de-identified.

Findings from this study indicate that Diversion Alert fills a significant data gap within Maine's Prescription Monitoring Program.



This data gap is not surprising. PDMPs provide data about drugs dispensed to data through pharmacies – they are not a repository for drug arrest records. This fact, coupled with the findings, provide evidence that Diversion Alert data delivers new, actionable information to prescribers and pharmacists distinct from the data in PDMPs, thereby completing the picture of who is abusing and diverting prescriptions.

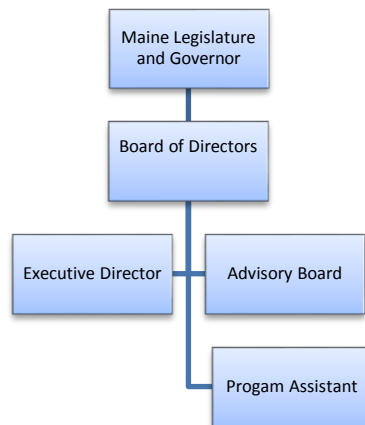
### Summary

These evaluation findings support Diversion Alert as a potent tool in providing knowledge to providers so that they can respond appropriately, efficiently, effectively, and non-punitively to patients in their care. Further, the differences among states on items discussed suggest that while they target different information, PMP and DAP complement one another and are affirmed as valued assets for health care providers.

### Program Management

Diversion Alert is a 501(c) 3 non-profit organization which employs two staff members under the oversight of a Board of Directors and statewide Advisory Board. The Advisory Board includes members of medical and law enforcement associations which are able to advise and support the work of the program.

## Organizational Chart



## Budge Narrative

Diversion Alert is funded through an appropriation from Maine's General Fund.

The total annual budget is \$95,000 per year.

<b>Payroll (Executive Director, Program Assistant, Taxes)</b>	<b>TOTAL:</b>	<b>55,616.00</b>
Purchased Services		
Membership Dues		210.00
Cell Phones		1,680.00
Internet		540.00
Evaluation		5,850.00
Web Support		1,500.00
Marketing		1,500.00
Insurance		3,200.00
Accounting and Legal		5,000.00
	<b>TOTAL:</b>	<b>19,480.00</b>
Supplies		
Postage and Mailing Supplies		4,000.00
Printing and Copying		4,135.00
Office Supplies		1,000.00
Computer/Software		2,000.00
Printer Lease		1,269.00
	<b>TOTAL:</b>	<b>12,404.00</b>
Travel		
Mileage		5,000.00
Conference, Meeting		2,500.00
	<b>TOTAL:</b>	<b>7,500.00</b>
<b>Total Annual Expenses</b>		<b>95,000.00</b>