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Evaluation of the California Mental Health Services Authority's Prevention and Early Intervention Initiatives

Executive Summary and Commentary

Edited by M. Audrey Burnam, Sandra H. Berry, Jennifer L. Cerully, and Nicole K. Eberhart

Sponsored by the California Mental Health Services Authority (CaMHSA)



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CalMHSA is an organization of county governments working to improve mental health outcomes for individuals, families and communities. Prevention and Early Intervention programs implemented by CalMHSA are funded by counties through the voter-approved Mental Health Services Act (Prop. 63). Prop. 63 provides the funding and framework needed to expand mental health services to previously underserved populations and all of California's diverse communities.

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About This Document

This document contains a summary and a commentary based on an interim evaluation report of the California Mental Health Services Authority (CalMHSA) Prevention and Early Intervention Program. In that report, we present, in detail, information on capacities and resources developed by Program Partners as part of the CalMHSA Statewide Prevention and Early Intervention Program and preliminary data on their reach. This report is currently under review and will soon be publicly available.

This document was sponsored by CalMHSA, an organization of county governments working to improve mental health outcomes for individuals, families and communities. This evaluation and prevention and early intervention programs implemented by CalMHSA are funded by counties through the voter-approved Mental Health Services Act (Prop 63). Prop. 63 provides the funding and framework needed to expand mental health services to previously underserved populations and all of California's diverse communities.

The research was conducted in RAND Health, a division of the RAND Corporation. A profile of RAND Health, abstracts of its publications, and ordering information can be found at www.rand.org/health. Questions about this document may be directed to Nicole Eberhart at Nicole_Eberhart@rand.org

Summary and Commentary

In 2004, California voters passed Proposition 63, the Mental Health Services Act (MHSA), which includes a mandate that the state provide prevention and early intervention (PEI) services and education for people who experience mental illness in the state of California. The California Mental Health Services Authority (CalMHSA), a coalition of California counties formed to provide economic and administrative support to mental health service delivery, formed the Statewide PEI Implementation Program based on extensive recommendations from a large number of stakeholders statewide. The CalMHSA Statewide PEI program is composed of three strategic initiatives focusing on: (1) reduction of stigma and discrimination towards those with mental illness, (2) prevention of suicide, and (3) improvement in student mental health. Each initiative is implemented with the assistance of community agencies serving as PEI Program Partners (see Table S.1 for the Program Partners under each initiative).

Table S.1
CalMHSA Statewide PEI Program Partners by Initiative

| Stigma and Discrimination Reduction (SDR) | Suicide Prevention (SP) | Student Mental Health (SMH) |
|--|--|--|
| <ul style="list-style-type: none"> • Disability Rights California • Entertainment Industries Council, Inc. • Integrated Behavioral Health Project/Center for Care Innovations • Mental Health America of California • Mental Health Association of San Francisco (MHASF) • National Alliance on Mental Illness • Runyon, Saltzman & Einhorn • United Advocates for Children and Families • SDR Consortium | <ul style="list-style-type: none"> • AdEase • Didi Hirsch Psychiatric Services • Family Service Agency of the Central Coast • Family Services Agency of Marin • Institute on Aging Center • Kings View • LivingWorks • San Francisco Suicide Prevention • Transitions Mental Health Association | <ul style="list-style-type: none"> • California County Superintendents Educational Services Association • California Department of Education • California Community Colleges • California State University • University of California |

In 2011, the RAND Corporation was contracted by CalMHSA to design and implement a three-year statewide evaluation of the three CalMHSA PEI Program initiatives, the overall effort, and specific Program Partner activities. The ongoing evaluation has three aims:

- To evaluate individual Program Partners’ progress toward meeting statewide goals and objectives
- To assess the resources and capacities developed by Program Partners as part of their CalMHSA-sponsored efforts, including the structural and operational processes that define the resources and capacities
- To evaluate outcomes of Program Partners’ activities, both short- and long-term.

To meet the aims set forth above, the evaluation focuses on evaluating Program Partner resource and capacity-building efforts that fall into six types of core activities that occur across initiatives:

- (1) the development of policies, protocols, and procedures
- (2) networking and collaboration
- (3) informational resources
- (4) training and educational programs
- (5) media/social marketing campaigns and interventions to influence how media productions depict mental health.
- (6) hotline and “warmlines” operations, that is, providing crisis support and basic social support, respectively.

Because Program Partners are required to conduct evaluations of their activities, RAND is evaluating a strategically selected subset of activities identified through conversations with CalMHSA and the Program Partners.

In addition to evaluating the activities above, the RAND evaluation is also developing baseline assessments of population risk factors and outcomes for the initiatives. These baseline assessments provide a platform for longer term monitoring of population risk factors and outcomes over time. Current baseline population tracking includes an analysis of county- and region-wide suicide rates, an in-progress student- and faculty survey of the school mental health climate across California, and a statewide survey of California adults’ beliefs about suicide, mental health stigma and discrimination, and the mental health climate in schools.

The evaluation aims are derived from the priorities set forth in the CalMHSA Statewide PEI Implementation Work Plan¹ and are set forth in detail in an evaluation plan developed by RAND and approved by CalMHSA. In addition, the RAND evaluation team has been providing technical assistance to Program Partners to promote the development of their capability to assist in the evaluation of the initiatives and promote continuous quality improvement efforts.

This document provides a summary and commentary on a more detailed interim report of the RAND evaluation of the CalMHSA Statewide PEI Program. This detailed interim report presents

¹ This document is available online at <http://calmhsa.org/programs/pei-statewide-projects/>

early findings on the capacities and resources developed by the Stigma and Discrimination Reduction, Suicide Prevention, and Student Mental Health initiatives. In addition, results of a baseline, statewide survey of the general population of California’s knowledge, attitudes, and beliefs toward mental health are presented. Summaries of each of these topics are provided below, and more detail will be available in the forthcoming interim report. While many programmatic activities have been implemented within the past year, others activities are still in development and will be implemented over the coming year. Thus, results presented at this time in this summary document and in the detailed interim report are necessarily preliminary.

Stigma and Discrimination Reduction

The RAND evaluation assesses select activities of Stigma and Discrimination Reduction (SDR) Initiative Program Partners that fall into four of the six core activity areas (see Table S.2).

Table S.2

Key Activities Being Evaluated Under the Stigma and Discrimination Reduction Initiative

| Type of Core Activity | |
|--|---|
| Development of policies, protocols, and procedures | X |
| Networking and collaboration | |
| Development of informational/online resources | X |
| Training and educational programs | X |
| Media/Social marketing campaigns and interventions to influence media production | X |
| Hotline and “warmlines” operations | |

Stigma and Discrimination Reduction Initiative Program Partners have developed many capacities and resources related to improving policies, procedures, and protocols, as well as informational resources related to stigma and discrimination reduction. These capacities and resources include fact sheets, toolkits, and reviews that identify and assess promising practices in SDR in community organizations. Many online resources have also been developed. For online resources, we present early results from website analytics to track how users are finding and interacting with Program Partner sites, what resources they are downloading, and where in California site visitors are located. These results show that there have been over 45,000 visits to online resources sponsored by CalMHSA, and site visitors have come from many areas across California. Continued tracking of online dissemination and implementation of tools for tracking reach off line are ongoing. Tools for understanding resource effectiveness are also being implemented.

SDR Program Partners are also making available a host of trainings and educational programs. These offerings include trainings for a wide variety of audiences, such as people with mental health challenges, family members of people with mental health challenges, landlords, health providers, county mental/behavioral health service managers, teachers, and students. Many of these trainings utilize contact with consumers of mental health services to help reduce stigma and discrimination (an evidence-based practice). Because tools for tracking the reach of the trainings and educational presentations and their impact on attitudes, beliefs, and behaviors have only been in place for a short time, we are unable to report results on reach and attitude change at this time.

In addition to providing informational resources and trainings, SDR Program Partners are implementing two media-related stigma and discrimination reduction strategies: providing media training to journalism and entertainment professionals and conducting a social marketing campaign targeting populations across the lifespan, with an emphasis on youth. Evaluations of these activities are in progress, and no results are available at this time.

Suicide Prevention

The RAND evaluation of the Suicide Prevention (SP) Initiative focuses on the evaluation of select Program Partner efforts that focus on four of the six core activity areas (see Table S.3).

Table S.3
Key Activities Being Evaluated Under the Suicide Prevention Initiative

| Type of Core Activity | |
|--|---|
| Development of policies, protocols, and procedures | |
| Networking and collaboration | X |
| Development of informational/online resources | |
| Training and educational programs | X |
| Media/Social marketing campaigns and interventions to influence media production | X |
| Hotline and “warmlines” operations | X |

The Suicide Prevention (SP) Initiative Program Partners are focused on building hotline and “warmlines”² capacities across the state, promoting networking and collaboration among hotlines and “warmlines,” and using social marketing efforts to promote suicide and mental health awareness. The evaluation includes an assessment of the networking and collaboration resulting from the efforts of Program Partner Didi Hirsch (a mental health service agency with a dozen

² A warmline is a non-crisis telephone service that provides encouragement and support to persons in need.

locations in and around Los Angeles), which is facilitating the California Suicide Prevention Network (CSPN). Reviews of related documents (e.g., Memoranda of Understanding [MOUs] with partners and emergency/crisis intervention protocols, policy recommendations, and meeting rosters and agendas) are in progress, and RAND will conduct key informant interviews and a collaboration survey at a later stage of the evaluation.

Four new crisis hotlines have been created, and several existing hotlines are seeking accreditation or have been accredited since the beginning of the contract period. To understand the reach of hotline and warmline operations, we are tracking call volume. We have developed a protocol for systematically monitoring hotline call quality.

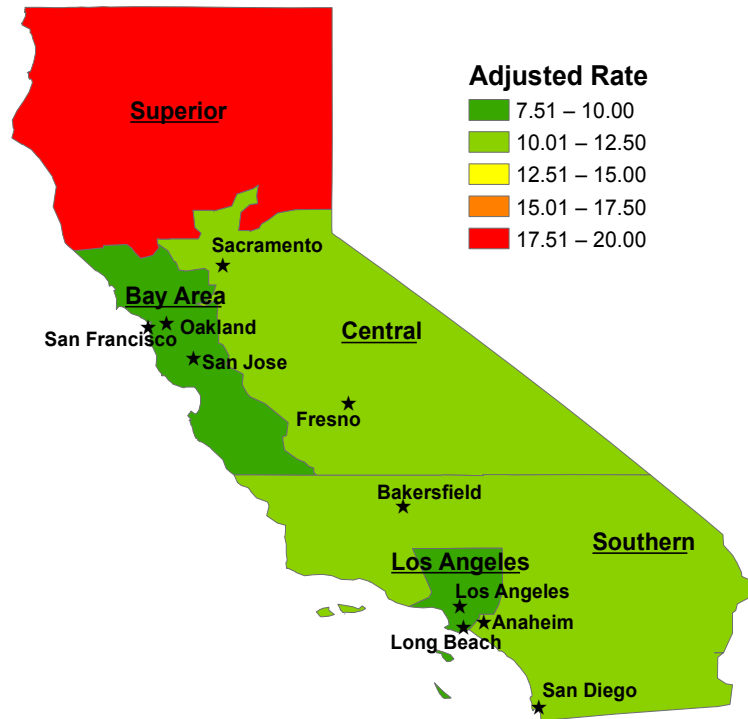
Evaluations of several suicide intervention trainings (LivingWorks' SafeTalk and ASIST trainings) are ongoing. Data on the demographics of training participants reached to date are available, and post-training surveys indicate high satisfaction with the trainings and increases in perceptions of self-efficacy and intentions to help people at risk. Monitoring of fidelity to the ASIST training protocol is in progress.

One Program Partner, AdEase, is conducting a social marketing campaign. The evaluation of SP social marketing activities is still in progress. We will evaluate campaign messages and their efficacy and assess the campaign's reach at a later point.

In addition to the evaluation of the key Program Partner activities above, we have analyzed suicide fatalities in California to establish baselines against which later suicide rates may be compared. Age-adjusted suicide rates by region are presented in Figure S.1. Two major findings emerge from this analysis. First, the suicide rate is highest in California's most-rural areas (e.g., Humboldt, Mendocino, Siskiyou, Butte, and Amador counties), indicating that those who live in these areas are at higher risk for suicide. Second, suicides in these areas actually account for a very small proportion of California's overall number of suicides (approximately 6%), indicating that resources must still be allocated to the areas of the state with the highest numbers of suicides.

Figure S.1. Map of Age-Adjusted Suicide Rates by Region (2008–2010)

2008–2010, Age-Adjusted Suicide Rates by Region



Student Mental Health

The RAND evaluation of the Student Mental Health (SMH) Initiative assesses select Program Partners' efforts in the three core activity areas highlighted in Table S.4. The Student Mental Health (SMH) Initiative Program Partners are focusing on improving the mental health of both K-12 and Higher Education students throughout California. These Program Partners are developing resources for improving student mental health, conducting trainings for educational professionals, and promoting networking and collaboration among school campuses and neighboring community organizations.

Table S.4
Key Activities Being Evaluated Under the Student Mental Health Initiative

| Type of Core Activity | |
|--|---|
| Development of policies, protocols, and procedures | |
| Networking and collaboration | X |
| Development of informational/online resources | X |
| Training and educational programs | X |
| Media/Social marketing campaigns and interventions to influence media production | |
| Hotline and “warmline” operations | |

The evaluation of SMH activities related to networking and collaboration will focus on the California County Superintendents’ Educational Services Association (CCSESA) county consortia, the State SMH Policy Workgroup, University of California (UC) and California State University (CSU) SMH Initiative Advisory Groups, California Community Colleges (CCC) Regional Strategizing Forums, and inter- and intra-campus collaborations among the higher-education Program Partners. Reviews of related documents (e.g., meeting rosters, agendas, policy recommendations) are in progress. Key informant interviews and a collaboration survey will be conducted later.

SMH Program Partners are making many informational resources available online. These include resources about mental health issues for students and information for faculty and staff regarding approaches to supporting students with mental health needs. Thus far, the websites hosting informational resources have been reviewed by RAND evaluators for content and target audience. Website analytics and feedback survey data are currently available for online resources developed by CCSESA (for K-12 schools). Early results are presented in this report and indicate that initial interest in the website has come primarily from school administrators and mental health professionals who are interested in students of all ages. Site visitors reported coming to the site to seek materials on a wide variety of topics, with mental health/wellness, bullying, and behavior management among the most prevalent. We are currently developing a follow-back survey designed to assess the usefulness of the materials.

SMH Program Partners implemented a variety of training programs to promote the early identification and appropriate referral of students experiencing mental health issues. Thus far, we have provided technical assistance to SMH Program Partners to implement training surveys, as well as tools for tracking the reach of trainings. In the future, several trainings will be selected for detailed content analysis. We present available data on training presentations and their reach in the report. Preliminary analyses of training survey data indicate that participants reported

being satisfied with the training and experienced increased self-efficacy and behavioral intentions after undergoing training.

In addition to the evaluation of the key Program Partner activities above, we have designed baseline surveys of student, faculty, and staff perceptions of school climate and student attitudes and behavior related to mental health, and we are in the process of collecting data for them. The K-12 survey has not yet been fielded, but preliminary data based on 6,309 higher education students and 3,025 faculty and staff are available. Based on their responses, about 20% of higher education students are likely experiencing a mental health problem, and 25% of student respondents reported either having used or having been referred to campus mental health services. Some 25% to 35% of students reported that their academic performance was negatively affected by anxiety or depression. However, 67% of students indicated that they know where to go for help with a personal problem. Students generally believed that the campus climate with respect to mental health issues is positive (e.g., more friendly than hostile). Faculty and staff agreed that their campuses provide adequate mental health counseling and support to students. 24% of faculty and staff reported having talked with a student about mental health once or twice, and 46% did not discuss mental health with students in the past month. Twenty percent of faculty/staff report having attended some form of training on student mental health. Over 50% of faculty/staff stated that they knew where to refer students who need mental health resources.

In summary, SMH Program Partners are engaging in a wide variety of activities, including collaborating with other organizations, providing informational resources, and offering training on student mental health issues. RAND evaluation activities designed to assess reach of these expanded capacities and resources are in progress. The ongoing administration of surveys of SMH climate provides a useful baseline against which to compare future school climate data.

General Population Survey: Baseline Preliminary Results

We conducted a general population statewide survey of California adults. The survey included questions about such topics as mental health literacy, stigmatizing attitudes, and exposure to CalMHSA PEI efforts. The main purpose of the survey is to serve as a baseline against which later data on the topics above can be compared. It also serves as a measure of early exposure of the general population to CalMHSA activities. A similar survey will be fielded in approximately one year so changes from baseline can be determined. We caution that one year is a short timeframe in which to observe widespread population-level change and suggest continued tracking to observe population-level change over time.

In conducting the general population survey, we aimed to establish baseline levels of knowledge, attitudes, and beliefs about SP, SDR, and SMH among the California adult population and to learn about early exposure to CalMHSA activities. Results presented here are preliminary, and we are continuing to analyze the survey data. We reached a diverse group of 2,001 California adults (age 18 and over). The sample closely matches known California

population characteristics in terms of sex, age, race, ethnicity, education, income, and employment.

Two-thirds of respondents were aware of stigma and discrimination toward people with mental health challenges. They personally held some stigmatizing attitudes and beliefs (e.g., about one quarter of respondents thought that people with mental health challenges are dangerous), but many also reported some positive beliefs about potential for recovery and contributing positively to society (e.g., 70% of respondents thought that a person with mental illness can recover). 92% of respondents expressed a willingness to support people with mental health challenges. 20% of respondents reported that they would hesitate to disclose having experienced a mental health challenge to their friends or family, and 17% indicated that they would hesitate to seek treatment for such a challenge out of fear of what others would think.

Respondents varied in their opinions about suicide. About two-thirds of respondents recognized that suicide is preventable, and just over half thought that suicide is always preceded by warning signs. About half also believed, incorrectly, that talking about suicide can cause suicide. Nearly half of respondents did not know that men are at greater risk of completing suicide than women. Respondents indicated that if they were having suicidal thoughts, they would be more likely to seek face-to-face help from a counselor or other mental health professional than to use other possible resources.

Respondents with a child in a K-12 school or in an institution of higher education and respondents who were themselves students in an institution of higher education were asked about school climate for handling issues related to mental health. Parents of K-12 students and students in higher educational institutions indicated that they “somewhat agree” with the idea that their school helped students and provided quality counseling and other resources to help students with social, emotional, and behavioral problems. Respondents who were themselves students typically agreed that their institution helps students and provides quality counseling.

Exposure to CalMHSA activities at the population level has been difficult to detect early in the project period. Eleven percent of respondents reported having seen or heard of the slogan “Each Mind Matters,” 8% had heard of “Reach Out,” and 9% had seen or heard of “Suicide is Preventable.” However, 2% or less of respondents visited the Each Mind Matters, Reach Out, or Suicide is Preventable websites. We note, however, that the Each Mind Matters website did not exist until partway through the data collection period. Also, some social marketing activities were targeted toward 14- to 24-year-olds, and the survey was only administered to Californians 18 and older. Some 39% of respondents reported seeing or hearing ads with specific AdEase taglines (e.g., “Know the Signs”). Furthermore, 16% reported having attended some sort of training about mental illness, but we cannot determine if these trainings were among those implemented through CalMHSA’s PEI initiatives.

Commentary

In this section, we step back from the detailed findings to date to offer our commentary on “how it’s going so far.” Stakeholders are intensely interested in knowing, as soon as possible, whether these investments in prevention and early intervention have been worthwhile, and what, if any, further investments are justified. The statewide PEI program investments were intended as one-time infusions of Proposition 63 tax dollars to develop prevention and early intervention program capacities that did not previously exist, and to launch a broad, multicomponent, prevention and early intervention campaign. The programmatic activities included in this campaign are generally consistent with current behavioral science theory, empirical evidence, and best-practice guidelines (Collins et al., 2012; Stein, et al. 2012; Acosta et al., 2012). Nonetheless, the question of whether these particular prevention and early intervention programs are producing their intended effects is a pressing one for California decisionmakers and other stakeholders.

Capacity Development

The development of new prevention and early intervention capacities were key activities for all Program Partners and necessarily preceded the actual delivery of the prevention and early intervention programs to targeted audiences. These capacities generally included the following:

- Creation of organizational structures required to implement programmatic components of the PEI initiatives (e.g., the embedding of new program goals within existing organizations, creation of collaborative and community relationships, development of organizational systems for managing PEI programs and contract requirements, making organizational changes that enabled program accreditation)
- Development of knowledge relevant to the PEI programs being implemented (e.g., literature reviews, information gathering, planning processes, staff training)
- Development of specific material resources required for PEI interventions (e.g., staff, equipment, materials, tools, websites).

While Program Partner organizations had existing capacities upon which they could build, the prevention and early intervention activities that these organizations were contracted to implement were new efforts, and in most cases represented an entirely new focus of program development and dissemination.

Our evaluation to date shows that the Program Partners have been highly productive in developing new program capacities. Program Partners have developed the capacities to deliver numerous new prevention and early intervention program activities. Program Partner efforts have resulted in the development of new organizational systems, staff expertise, informational resources, collaborative relationships, training protocols, materials developed and tailored for diverse target audiences, and internal evaluation capacity. This has all been accomplished in a relatively short time – only two years from the initial selection of Program Partner organizations.

Given the many challenges inherent in developing entirely new program activities, this is an impressive accomplishment.

There are also many unique and innovative aspects of this capacity development that derive from the broader policy and organization context of the implementation of these statewide PEI initiatives. To our knowledge, these initiatives are the first mental health prevention and early intervention programs to be implemented at the state level; most prevention and early intervention programs have been, and continue to be, implemented at the county level, under the direction of each county's mental health authority. It is also important to appreciate that these many and diverse Program Partner-developed capacities are components of an interrelated and complementary strategic plan, one that was carefully and broadly informed through a strategic planning process that involved diverse stakeholders (Clark et al., 2013). These PEI initiatives are arguably bold and ambitious efforts for the state of California – both in the uniqueness of a new strategic “statewide” approach to PEI programs, and because they are managed by a relatively new and innovative organizational body that requires joint decisionmaking across California's many and diverse counties. It is even more remarkable, then, with such an innovative statewide strategic plan to implement, and with a new organizational entity to manage the implementation of the strategic plan, that so much has been accomplished so quickly.

Another important and innovative aspect of the statewide PEI initiatives is the emphasis on evaluation. In addition to the independent evaluation being conducted by RAND, each of the Program Partners was required to plan its own evaluation activities, with a focus on developing capacities for performance assessment and quality improvement. Program Partners were provided technical assistance, as needed, to carry out their own evaluation activities, as well as assistance to develop the data required for the RAND evaluation. This investment in developing evaluation capacity, at both the programmatic and broader initiative and population levels, is ground-breaking. These evaluation efforts will not only help inform decisions about further investment in statewide PEI activities but have also resulted in the development of evaluation approaches and tools that can be useful models for other county-directed PEI activities. The development of capacity to monitor population-level outcomes, risk factors, and exposure to PEI activities provides a platform for statewide assessment of the longer-term impacts of investments in PEI activities.

The statewide PEI initiatives, as originally designed, were intended to be a three-year investment in statewide PEI capacity development. Capacity development represents a large up-front investment in creating new program resources. Once new capacities are developed, it is logical to expect that program activities will be less costly to maintain and continue to deliver. However, a loss of ongoing funding could in some cases result in a loss of capacities (e.g., loss of staff expertise and disassembling of organizational systems and tools) that will not be recoverable without duplicative up-front investment.

The key policy questions that are becoming urgent for CalMHSA and other stakeholders are the following: (1) What among these statewide PEI activities should be sustained? (2) Is there

any near-term fine-tuning of the initiatives that is likely be beneficial? In spite of the impressive development of program capacities that indicate an ambitious statewide strategic PEI plan can indeed be implemented, and quickly, it is difficult to answer these questions at this time. Below, we summarize the ways that the RAND evaluation will inform stakeholders about the reach, short-term impacts, and long-term impacts of the PEI initiatives.

Reach

In order to have impact, it is important that PEI programs result in a broad reach to their relevant populations. The reason that broad reach is generally a critical aspect of any health prevention and early intervention strategy is that there is almost always an imperfect relationship between the risk factors and the adverse health state (e.g., illness) that is the object of the preventive intervention. If a preventive intervention is targeted only to a small number of high-risk individuals, it will fail to prevent the many more cases of illness that occur among the much larger proportion of individuals who are not identified as high-risk. In order for preventive interventions to have the potential to reduce the prevalence of an illness or other adverse health consequence, they must be broadly targeted, with the aim of reducing the entire distribution of risk in the population. Geoffrey Rose's classic text, *The Strategy of Preventive Medicine*, calls this "the prevention paradox," and his insights into strategies for improving health at the population level have become key principles of preventive medicine (Rose, 1992).

Many health prevention strategies are educational in nature and attempt to increase knowledge or change attitudes in ways that can lower risks of adverse health outcomes – for example, strategies for reducing tobacco use and improving nutrition include educational components. As suggested by the Rose "prevention paradox," these prevention strategies are usually targeted to a broad population rather than just high-risk individuals (e.g., heavy smokers or those who are obese). In addition, educational approaches generally require repeated exposure and diverse sources of consistent messages to begin to see shifts in population risk factors.

In this evaluation of the statewide PEI initiatives, then, it is important to monitor the "reach" of the various prevention activities that are being implemented, that is, how many people participated in various prevention activities such as trainings and presentations or accessed informational materials. In addition, the number of individuals who are "exposed" to various prevention education messages is important to track. A television documentary, for example, may reach a large population of potential viewers in the media market when the movie is aired, but unless viewers are tuning into and closely attending to the documentary, they are not "exposed" to those preventive messages. In another example, an individual may access website materials (this individual was "reached") but may not read and understand the materials (no "exposure" to the educational information). Finally, some of the PEI prevention activities focus on a selected group of individuals who in turn are expected to educate or influence others. These include train-the-trainer activities, the development of trained speakers, interventions directed to media entertainment writers, and those that focus on gatekeepers such as faculty, peer leaders,

health providers, and police. For these kinds of interventions, it is important to track the “secondary” reach beyond the targeted audience – that is, how do these individuals who participate in the PEI program activities in turn engage in behavior that has the potential to influence others.

While it is conceptually straightforward to measure the reach of program activities and exposure to program educational information, it is often practically difficult or infeasible to obtain this information. We have worked very closely with each Program Partner to develop practical approaches and tools to track the reach of and exposure to their key program activities, in areas where it is feasible to do so.

The statewide PEI strategic plan emphasizes targeting and reach to historically underserved and vulnerable populations and reach across the age span. This emphasis has scientific and social equity justification, but it also creates many programmatic challenges. Many Program Partners have worked to develop culturally appropriate and age-appropriate approaches to the diverse audiences that they target, with very little information available from the empirical literature to guide this tailoring. In some cases, Program Partners are also developing unique delivery approaches to find and reach vulnerable or historically underserved populations. To the extent it is feasible, Program Partners have put into place methods for documenting the reach of their program activities to specific vulnerable and underserved population, but collection of this sort of demographic information is sometimes particularly sensitive and difficult to obtain, and in these cases is limited.

From the information that Program Partners have been able to provide us to date, it is clear that the launching of many program activities is well under way, particularly for the short time that the programs have had to develop and implement their PEI activities. It is also clear that reach is so far relatively limited, given the potential of most of these programs to much more broadly penetrate their target populations.

Even another year of activity is a relatively brief time to achieve extensive reach of, and population exposure to, PEI educational efforts. It is likely, however, that implementation of program activities will be sufficiently far along to evaluate future potential for reach. In other words, we expect that within the next year, all program activities will be fully implemented and have had at least a few months of delivery to their target audiences, which will provide a period for observing reach.

Short-Term Outcomes

Prevention and early intervention activities “work” by modifying risk factors. The PEI program activities implemented in these statewide mental health initiatives are intended to reduce longer-term risk and therefore adverse mental health consequences by creating short-term impacts that include changing attitudes, increasing knowledge, promoting positive behavior (such as support-giving and help-seeking), and promoting well-being. In some cases the statewide PEI activities target broad community or school populations; in some cases they target

those who are in key positions to influence others; and sometimes activities more directly target those at risk for or currently experiencing mental health problems. Logically, people must be exposed to the interventions, and then the interventions must have short-term intended effects on those who are exposed to them in order to have the potential to contribute to longer-term prevention of adverse consequences associated with mental health problems.

Our evaluation is designed to examine short-term effectiveness of many but not all program activities. The studies we have designed vary depending on the type of activity; they include studies of fidelity to evidence-based training protocols, hotline call adherence to best practice standards, pre-post evaluations of participants exposed to presentations and trainings, media message experiments, and collaboration network surveys.

To date, we can say little about short-term outcomes because none of these studies is complete and some have not yet begun data collection. Generally, these studies are on track as planned, though in some cases they are somewhat delayed because of some delays in implementation of program activities.

Each of the short-term outcome studies in the evaluation plan is critically important for deciding whether key program components are performing adequately or whether they need improvement. We note, however, that the short-term outcome evaluations tend to be the parts of the RAND evaluation that have generated the most sensitivity on the part of Program Partners and have required extensive negotiation and mutual accommodation between our evaluation team and the Program Partners. Many issues have arisen, including concerns about the data collection burden on staff and participants, concerns about disruption of program operations, issues regarding protection of human subjects' privacy and confidentiality, and questions about how data will be used and reported. While many issues have been resolved, some Program Partners continue to bring new issues to our attention, and we continue to work with them to alleviate concerns so that all of the planned outcome studies can be conducted. Because the study of hotline call adherence to best practice standards was just recently approved as an added component of our evaluation contract, we are still in the initial phases of working with Program Partners to implement this study. This is a state-of-the-art evaluation approach and the only way in which the performance of the PEI program investment in hotlines will be assessed.

The RAND evaluation was designed as a comprehensive one-time evaluation of the overall CalMHSA statewide prevention and early intervention initiatives. Short-term outcome studies focus on a few key program components but do not encompass all the PEI activities in which program partners are engaged, nor is it the goal of the RAND evaluation to fully evaluate the performance of specific Program Partner organizations. Separate from the RAND evaluation, all Program Partners were mandated to conduct specific evaluation studies to inform their planning and implementation of PEI activities or to test the effectiveness of their interventions. These studies should contribute to evaluation of Program Partner performance and in many cases to a broader knowledge of the short-term impacts of specific program activities.

Longer-Term Outcomes

Many of the risk factors of interest, as well as the adverse mental health related consequences that are the ultimate targets of the statewide PEI initiatives, are observable only at the population level. The reason for this is that program effects on these outcomes are likely to be distant in time from short-term program effects and are also likely to be removed from the original program participants. For example, an individual who is exposed to suicide prevention education today might, in a few years, encourage a friend to seek treatment for emotional distress, which in turn will increase the likelihood that the friend will get treatment and will reduce the risk of adverse mental health consequences, including suicide, for the friend. It would obviously be difficult to link a particular program activity to that longer-term outcome. In addition, multiple prevention and early intervention program activities can have additive effects toward reducing the risk for adverse mental health consequences over the longer term. A broad social marketing campaign, for example, might reinforce the messages of a targeted school-based educational program, and together these programs would increase the likelihood of improved mental health knowledge.

Prevention strategies that have been successful in reducing population risk factors, such as tobacco use and high blood pressure, are often composed of many diverse program activities that are all aimed toward changing health behavior. Ultimately, these multipronged prevention programs can be observed to shift the distribution of the behavioral risk factor toward a lower mean in the general population, which in turn is associated with reduced incidence of the adverse health consequence of interest (e.g., lung cancer and heart disease (Lightwood and Glantz, 2013)).

It follows that long-term population tracking is essential to evaluating the impact of the statewide PEI initiatives on longer-term outcomes. As part of the RAND evaluation, we are putting into place population surveys and expanding existing population surveys, in order to establish baseline tracking of the longer-term risk factors and outcomes of interest and to establish methods for tracking changes over time. Initial findings from partially launched higher-education surveys, and from a statewide adult population survey, were presented in this report. Other population surveys are yet to be launched. Together, they form a strong and fairly comprehensive evaluative infrastructure for longer-term tracking of prevention and early intervention outcomes of interest.

Longer-term tracking of population indicators in itself does not readily answer the question of whether particular prevention and early intervention strategies produced any changes that might be observed. A number of methodological and statistical approaches can be used to try to disentangle other potential influences (for example, socioeconomic effects) from program effects on outcomes. The rigor of this sort of analysis is greatly improved if comparison population data are available from populations that have not been exposed to the programs (for example, from other states or from time periods prior to the program implementation). We have looked into

opportunities to develop these comparisons, and when possible, we have drawn on existing survey measures to maximize comparability to existing data from other populations.

We caution that the period of active PEI efforts and evaluation for these initiatives is very short for seeing impacts on most of the longer-term outcomes of interest. However, it is possible that we will be able to observe some one-year changes in population attitudes and knowledge, and both our school and adult population surveys are designed to capture these. These surveys are also designed to track exposure to some program activities that are more difficult to track directly through Program Partner monitoring.

Ongoing Performance Assessment and Improvement

It was not a goal of the RAND evaluation to develop a system of ongoing performance assessment for PEI program activities. However, many of the approaches and tools used to collect information about the reach and short-term impacts of program activities can be utilized by Program Partner organizations to develop an ongoing monitoring and reporting capacity. Ideally, prevention and early intervention programs should incorporate ongoing evaluation of reach and short-term outcomes as part of their own management and performance improvement activities. Ongoing evaluation can help programs in their efforts to refine and improve their prevention and early intervention activities. Some Program Partners are developing a monitoring and evaluation infrastructure to do this; others see the evaluation mandates associated with their CalMHSA contract as a one-time burden and do not envision developing a longer-term evaluation capability.

Stakeholder questions about how to improve the quality and value of PEI strategies and program efforts could be addressed by the development and maintenance of ongoing performance assessment and improvement systems for PEI programs.

Conclusions

There is a logical, science-informed path from the statewide strategic plan to reduction in mental health stigma and discrimination, reduction in suicide, and improvement in student mental health. This path involves (1) the strategic planning of comprehensive, interrelated program components, (2) development of new prevention and early intervention program capacities, (3) delivery of new program activities to achieve broad reach to California's diverse population and result in significant exposure to program materials, (4) impact of program activities on targeted short term outcomes such as knowledge and attitudes, and (5) impact on longer term outcomes for California's population. It is important to evaluate these efforts so that other prevention and early intervention efforts (e.g., in counties, other states) can make use of the knowledge that the evaluations generate and focus investment on effective strategies.

Are the statewide PEI programs on track toward reaching the goals of the strategic plan? At this time, it is clear to us that statewide PEI program capacities have been greatly expanded, that delivery has been launched for many program components, and that reach is in a rapidly

expanding phase. We do not know yet whether programs are having their intended short-term impacts on participants/audiences, but we expect to be able to answer those questions for key program activities within the timeframe of this evaluation. We caution that it may be unrealistic to expect observable population changes in the long-term outcomes of interest, given the start-up time required to build and launch new programs, the relatively brief time that program effects will be observed, and the importance of broad population reach and exposure necessary for prevention to have an impact.

References

- Acosta, Joie, Rajeev Ramchand, Lisa H. Jaycox, Amariah Becker, and Nicole K. Eberhart, *Interventions to Prevent Suicide: A Literature Review to Guide Evaluation of California's California's Mental Health Prevention and Early Intervention Initiative*, Santa Monica, CA: RAND Corporation, 2012. As of October 29, 2013:
http://www.rand.org/pubs/technical_reports/TR1317
- Collins, Rebecca L., Eunice C. Wong, Jennifer L. Cerully, Dana Schultz, and Nicole K. Eberhart, *Interventions to Reduce Mental Health Stigma and Discrimination: A Literature Review to Guide Evaluation of California's California's Mental Health Prevention and Early Intervention Initiative*, Santa Monica, CA: RAND Corporation, 2012. As of October 29, 2013:
http://www.rand.org/pubs/technical_reports/TR1318
- Clark, Wayne, Stephanie N. Welch, Sandra H. Berry, Ann M. Collentine, Rebecca Collins, Dorothy Lebron, and Amy L. Shearer, "California's California's Historic Effort to Reduce the Stigma of Mental Illness: The Mental Health Services Act," *American Journal of Public Health*, Vol. 103, No. 5, 2013, pp. 786–794.
- Lightwood, James, and Stanton A. Glantz, "The Effect of the California Tobacco Control Program on Smoking Prevalence, Cigarette Consumption, and Healthcare Costs: 1989–2008," *PLoS ONE*, Vol. 8, No. 2, 2013, pp. 1–11.
- Rose, Geoffrey, *The Strategy of Preventive Medicine*, Oxford: Oxford University Press, 1992.
- Stein, Bradley D., Lisa Sontag-Padilla, Karen Chan Osilla, Michelle W. Woodbridge, Courtney Ann Kase, Lisa H. Jaycox, Elizabeth D'Amico D'Amico, Jennifer L. Cerully, Nicole K. Eberhart, and Shari Golan, *Interventions to Improve Student Mental Health: A Literature Review to Guide Evaluation of California's California's Mental Health Prevention and Early Intervention Initiative*, Santa Monica, CA: RAND Corporation, 2012. As of October 29, 2013:
http://www.rand.org/pubs/technical_reports/TR1319