Suicide Prevention Hotlines in California: Diversity in Services, Structure, and Organization and the Potential Challenges Ahead

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In 2014, nearly 43,000 Americans lost their lives to suicide, and almost 500,000 visited an emergency department for a self-inflicted injury (Centers for Disease Control and Prevention, 2014). These suicides and suicide attempts are the "tip of the iceberg" of those in physical and emotional distress. The numbers also indicate the vast number of families and communities that are left devastated in the aftermath of these incidents. In response, President Obama's New Freedom Commission on Mental Health has called for a national strategy for suicide prevention (New Freedom Commission on Mental Health, 2003).

Californians accounted for 4,214 of the nation's suicides in 2014 and 33,350 emergency department visits for self-inflicted injuries (California Department of Public Health, 2014; Centers for Disease Control and Prevention, 2014). Recognizing the burden of suicide in the state, California counties made preventing suicide one of their strategic initiatives in 2007. They invested a significant proportion of the resources they received as a result of the passage of Proposition 63, the Mental Health Services Act (MHSA), into suicide prevention hotlines. Suicide prevention hotlines generally prevent suicide in two ways: They ensure the immediate safety of suicidal callers, and they link those who may be at risk of suicide (e.g., persons with mental health disorders or who are homeless) with appropriate and available resources (Acosta et al., 2012).

The California Mental Health Services Authority (CalMHSA), the joint powers authority that administers the MHSA, also decided to include a strong evaluation component to inform decisions regarding continued investment. As part of that evaluation, this report identifies organizational factors and policies that influence the services that suicide prevention hotlines provide, current and potential challenges to their operations and missions, and recommendations for strengthening the existing landscape of hotline support. Its focus is on California, but the implications may reach far beyond.

Background on the RAND Evaluation

The MHSA, passed in 2004, required that the state and counties develop an approach to providing mental health prevention and early intervention (PEI) services and education to Californians, and a coalition of counties created CalMHSA to provide administrative support for the delivery of these services (Clark et al., 2013). In 2007, the Mental Health Services Oversight and Accountability Commission, which oversees the MHSA, decided that suicide prevention, stigma and discrimination reduction, and student mental health would be the focus of the PEI initiatives. Under the suicide prevention program, CalMHSA funded the creation of one suicide prevention hotline and provided funding for three to five years to enhance 11 existing hotlines—for example, by supporting expanded language translation services, hours of operation, or modes of access (such as chat or text); facilitating accreditation (described later in this report); or targeting vulnerable populations with suicide prevention campaigns.

In 2011, CalMHSA asked the RAND Corporation to evaluate its statewide PEI programs, including the suicide prevention hotlines it funded. We confronted significant challenges in designing the evaluation plans, however. First, it is difficult to scientifically test whether suicide prevention hotlines and other types of crisis lines reduce suicide rates in a community. To date, no empirical study has demonstrated this relationship. However, we do know that call centers sometimes work with emergency dispatchers to send emergency personnel to scenes of suicide crises (Gould, Lake, et al., 2016). In attending to a person who has described an intent to take his or her own life or who has already attempted suicide, these emergency personnel may save a caller's life. Recent evaluations of suicide hotlines have generally used objective third-party evaluators who have listened to live or recorded calls and have found that callers experience reduced distress and suicidal thoughts or intent over the course of a call (Gould, Cross, et al., 2013; Gould, Kalafat, et al., 2007; Gould, Munfakh, et al., 2012; King et al., 2003; Mishara and Daigle, 1997; Ramchand, Jaycox, et al., 2016).

Recognizing these challenges and drawing on past research, RAND's evaluation consisted of three parts: two data-collection efforts and an analysis of organizational factors that influence hotlines. The two data-collection efforts are described elsewhere (Becker and Ramchand, 2014; Ramchand, Jaycox, et al., 2016) and briefly described in the text boxes on the next few pages. Briefly,

1. *A statewide survey of California adults asking how likely they would be to use each of a series of resources if they were seeking help for suicidal thoughts.* As shown in the figure at right, survey participants ranked calling a crisis line fourth, with 62 percent stating that they were likely to make such a phone call. In comparison, 46 percent favored a web-based chat platform, and 43 percent said they would prefer to text a crisis line. The top-ranked preferences were seeking face-to-face help from a mental health professional (78 percent) or family and friends (72 percent) and visiting a website for information or resources (66 percent) (Becker and Ramchand, 2014).

2. *Visits to ten of the 12 CalMHSA-funded suicide prevention hotlines, during which members of the evaluation team listened to and rated 241 calls, or an average of 24 calls per crisis center.*[1] The results revealed variability across call centers. For example, across the ten crisis centers, the proportion of callers at risk of suicide varied from 3 percent to 57 percent. Call responders' compliance with guidelines to ask about current suicide risk, past ideation, and past attempts also ranged considerably. Consistent with past evaluations, we found that the majority of call responders established good contact or rapport with callers, and nearly half of callers experienced reduced distress at the end of the call (Ramchand, Jaycox, et al., 2016; see Jaycox et al., 2015, for details on the monitoring protocol).

The third component of RAND's evaluation of California's suicide prevention hotlines is this report, in which we identify organizational factors and policies that influence the services that the hotlines provide, current and potential challenges to their operations and missions, and recommendations for strengthening the existing landscape of hotline support. The report draws on our visits and information collected from the 12 agencies that received CalMHSA funds to create, expand, or enhance their suicide prevention hotlines; results from the first two components of our evaluation; visits and interviews with agencies that operate suicide prevention hotlines outside of California (including the national Veterans Crisis Line [VCL]); and a review of the literature, including government reports and gray literature. We describe the current landscape of crisis hotlines in California, based on the 12 CalMHSA-funded suicide prevention hotlines; discuss challenges facing the field; and offer recommendations for improving access to and the quality of these hotlines. Ideally, such a study would examine all suicide hotlines operating in a

Preferences for Help for Suicidal Thoughts
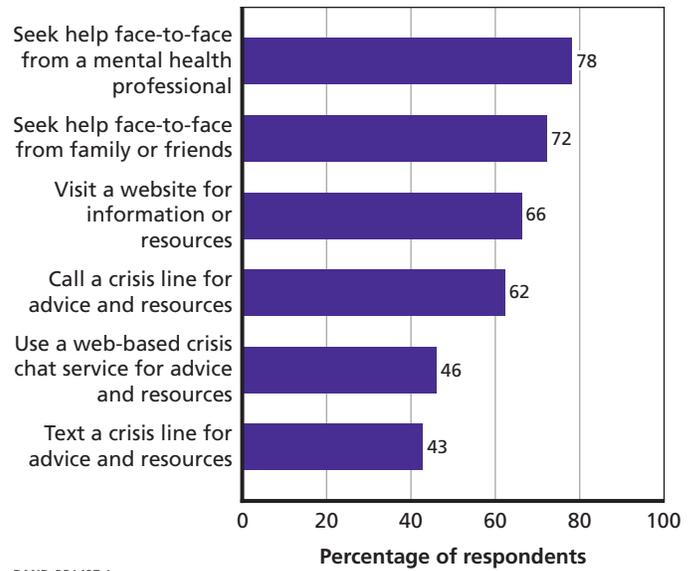
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state. The privately run website Suicide.org lists more than 90 suicide prevention hotlines in California (Suicide.org, undated), but there is no official directory of such hotlines.

To complement and lend context to the findings from our analysis of the CalMHSA-funded hotlines, this report includes insights from evaluations of other programs, including national suicide prevention hotlines. However, we caution that without a complete list of hotlines, it is likely that our description of organizational factors and challenges facing California's suicide prevention hotlines is less than comprehensive. Additional challenges may have surfaced if the scope of our analysis had included all suicide prevention hotlines available to California residents at risk for suicide.

What Is a Suicide Prevention Hotline?

Before a comprehensive list of suicide hotlines can be reliably developed and maintained, it is important to determine what constitutes a suicide hotline. According to a report by the California Department of Mental Health, Office of Suicide Prevention (2011, p. 3), *suicide prevention hotlines* "provide phone-based services for individuals who are at risk of suicide or concerned about someone at risk of suicide." The report differentiates suicide prevention hotlines from at least three other types of crisis lines that operate in the state: (1) County Mental Health ACCESS lines, which counties are required to operate to provide mental health information and referral services; (2) 211 lines, part of a national program to connect callers with information about local health and social services; and (3) "warmlines," which provide services to callers in non-crisis situations (i.e., callers who may be lonely but not in crisis or distress). Suicidal individuals may also call 911 or other emergency services, such as domestic violence or poison control hotlines. While the organizations that fund and operate these lines may know or understand the differences between

Evaluation Results from RAND's General Population Survey of California Adults
For detailed reports, visit www.rand.org/health/projects/calmhsa/publications.html#suicide-prevention-

In the spring of 2013, RAND launched a statewide telephone-based survey, including both landlines and cell phones, of adults in California. Participants could choose to respond to the survey in English, Spanish, Cantonese, Mandarin, Vietnamese, Hmong, or Khmer. That summer, additional households were contacted to increase the sample of African Americans and Asian Americans. The survey participation rate among eligible households was approximately 50 percent, though there may have been other eligible households in the initial sample that the team was unable to contact and screen. The procedures yielded a total of 2,568 adults, and weights were created to make the results representative of California's adult population. From May to December 2014, the research team re-contacted 1,285 (50 percent) of the original respondents. All procedures were approved by RAND's Institutional Review Board.

Key results from the survey specific to suicide prevention

Preferences for suicide crisis services
Adults were asked, "If you were seeking help for suicidal thoughts and knew where to find resources to help, how likely would you be to use each of the following resources?" They were presented with six response options. Preferences, in order of how frequently they were endorsed, were as follows: seek face-to-face help from a mental health professional (78 percent), seek face-to-face help from family and friends (72 percent), visit a website (66 percent), call a crisis line (62 percent), use a web-based crisis chat service (46 percent), and text a crisis line (43 percent) (Becker and Ramchand, 2014). There were slight differences in preferences between Asian-American, African-American, and Latino adults (Ramchand and Roth, 2014b), and, among Latinos and Asian Americans, those who took the survey in English versus in another language (Ramchand and Roth, 2014a).

Exposure to and impact of the Know the Signs evaluation campaign
Adults were asked a series of questions that, when combined, measured their confidence to identify, intervene, and refer people at risk of suicide to services and other resources. When they were first interviewed, participants scored an average of 4.3 on a scale from 1 to 7, with Latinos and Asian Americans scoring somewhat lower than whites (Ramchand and Roth, 2014b). Latinos who took the survey in English scored somewhat higher than Latinos who took the survey in Spanish (Ramchand and Roth, 2014a). Moreover, respondents who were exposed to the CalMHSA-sponsored Know the Signs social marketing campaign for the first time between survey waves 1 and 2 reported higher levels of confidence at wave 2 than those who were not exposed between the survey waves (Ramchand, Roth, et al., 2015).

these resources and suicide prevention hotlines, there has been no research documenting whether the general public or potential callers are aware of these distinctions. It seems likely that multiple types of hotlines receive calls from suicidal individuals and may be called on to provide help and support even though they do not market themselves as such.

Organizations that identify as suicide prevention hotlines may engage in a variety of activities not limited to fielding incoming crisis calls. For example, they may conduct outreach, make outgoing calls to provide follow-up support, operate "blended" call centers that receive calls from multiple types of hotlines, or engage in broader professional activities. (As discussed later, some suicide prevention hotlines are housed in community mental health centers or other health care settings or in mental health service agencies.) The following is an overview of the most common services provided by agencies that operate suicide prevention hotlines:

- *Outreach.* Many organizations engage in outreach either formally (e.g., through training programs in schools or for law enforcement officials) or informally (e.g., hosting a table at a health fair or other public event).

- *Outgoing calls.* Organizations may place outgoing calls to check on previous callers. For example, the CalMHSA-funded, San Francisco–based Institute on Aging's Friendship Line is marketed as both a crisis intervention hotline and a warmline that places outgoing calls to check in with elderly and disabled adult clients to help prevent a crisis. Some hotlines partner with local emergency departments to follow up via telephone with high-risk patients after a mental health hospital discharge. Randomized control trials have indicated that such follow-up calls delay or prevent suicide reattempts (Ghanbari et al., 2016; Luxton, June, and Comtois, 2013) and have a positive return on investment (Richardson, Mark, and McKeon, 2014).

- *Blended call centers.* Calls from multiple hotlines may all be routed to a single call center (a blended center), where different responders are trained to take different calls or all responders are trained to take all types of calls. For example, in addition to serving as its county's suicide prevention hotline, the Contra Costa Crisis Center takes calls through the 211 program and answers the Contra Costa County's child abuse, elder abuse, and grief hotlines.

- *Professional activities.* Organizations that operate suicide prevention hotlines are typically involved in a broad range of other professional activities. Organizations themselves, their directors, and call responders may belong to groups that share best practices, advocate collectively, conduct joint trainings for call responders or community members, and enter into agreements to serve as backup call centers. There are three prominent national associations for professionals from these types of organizations: the National Association of Crisis Organization Directors, Contact USA, and the American Association of Suicidology. We are aware of two additional groups serving California organizations: the Bay Area Suicide and Crisis Intervention Alliance and the California Suicide Prevention Network.[2]

The Current Landscape of Suicide Prevention Hotlines in California

Hotlines Collect Data on Call Volume and Characteristics, but There Have Been No Statewide Studies of Demand, Capacity, or Access

There are at least three factors to consider when determining whether there are gaps in Californians' access to suicide prevention hotlines: the need (or demand) for services, the organizational capacity (or supply) of these services, and the rate at which callers can access and use such services. Sources of data on need could include regional rates of suicides and suicide attempts; population-based surveys of residents asking about suicidal thoughts and the severity of such thoughts (such as those currently included in the California Health Interview Survey); reports of encounters, such as emergency department admissions of new patients with self-injury; reports from homeless shelters and other social service agencies on the proportion of clients who experience a crisis while in residence; and law enforcement reports (including 911 calls) on potential suicide cases, rescues from suicides in progress, or situations that could have escalated and resulted in suicide (e.g., encounters with individuals with severe mental illness). However, to date, there have been no studies assessing the need for suicide prevention hotlines in California.

The second factor, capacity, is the availability of hotline services to meet the need for suicide crisis services. Some hotlines, including all the suicide prevention hotlines that received support from CalMHSA, collect information on the number of calls, chats, and texts that are answered and unanswered and the number of callers who are forwarded to call centers outside the state or put on hold. Capacity also includes days and hours of operation across providers. To date, there have been no statewide assessments of suicide hotline capacity.

The third factor consists of personal and social factors (e.g., knowledge, values, beliefs, social support) that either reduce or increase the probability that those needing them will access and receive services. To understand these barriers and facilita-

tors, one would need to assess public awareness of hotlines and other crisis resources, likelihood to contact these resources, and perceptions of the utility of these resources. Much of this information would derive from surveys of California residents that gauge perceptions of using these hotlines. As mentioned earlier, RAND's survey of California adults indicated that 62 percent would prefer to call a crisis line when seeking help for suicidal thoughts (Becker and Ramchand, 2014). These findings provide some evidence of public awareness of suicide prevention hotlines.

There Are Several Established Avenues for Accreditation and Quality Measurement

In describing the suicide prevention hotline landscape, it is critical to consider not only gaps in access to services but also gaps in the quality of these services—when the services that people typically receive are not consistent with high-quality care. The Institute of Medicine (2006) has defined *high-quality care* as care that is based on the best available evidence and expert consensus about what is most effective; safe, meaning that the expected health benefit is higher than the expected health risk; patient-centered, meaning that the values and preferences of individuals are respected in clinical decisionmaking and that patients are fully informed participants in decisions about their treatment; timely, meaning that delays that might be harmful to health are avoided; efficient, meaning that programs avoid wasting resources; and equitable, meaning that care does not vary by gender, ethnicity, geographic location, or other patient characteristics. The quality of health care services is generally measured by establishing standards or practice guidelines for specific services and then using these standards or guidelines to evaluate services provided.

For suicide prevention hotlines, quality is typically established in two ways:

- *Accreditation.* Of the external bodies that accredit suicide prevention hotlines, the American Association of Suicidology is perhaps the most popular. It evaluates applicants in seven core areas: (1) administration and organizational structure, including operating space, leadership, and financial accountability; (2) screening, training, and monitoring requirements for call responders; (3) general service delivery, including whether the hotline provides services 24/7 and its recordkeeping on clients; (4) services available for life-threatening crises, including training in acute crisis and rescue service protocols; (5) ethical standards of practice, including ethical treatment of callers and confidentiality; (6) community integration, including partnerships with other community organizations or those that work with high-risk populations; and (7) program evaluation.
- *Evaluation.* Evaluations of crisis hotlines have generally employed three strategies to evaluate effectiveness: (1) examining whether the presence of crisis-line support correlates with community rates of suicide; (2) monitoring calls, by either listening to calls in real time or listening to recorded calls; and (3) following up with callers after the call. We

identified approximately 20 studies fitting any of these categories in the peer-reviewed literature since the first study of this nature was published in 1969 (Weiner, 1969; see Jaycox et al., 2015, for a review of these evaluations). As described earlier, RAND's evaluation of CalMHSA's investment in suicide hotlines relied on the second of these strategies, in which RAND raters listened to calls in real time. None of the call centers we visited recorded their calls.

Several Hotlines—Both National and Local—Are Available to California Residents

The number of hotlines marketed to the public is not necessarily the same as the number of call centers that respond to calls. An organization may promote a primary hotline number, a number for teens, a number for Spanish speakers, and both toll-free and local numbers for each group—with all of these numbers routed to the same call center. As described earlier, some call centers are blended, answering calls from multiple hotline numbers.

At least three resources are marketed nationally: (1) the National Suicide Prevention Lifeline (commonly referred to as "Lifeline"; 1-800-273-TALK) and its Spanish-language services; (2) the Trevor Project's Lifeline (also known as "TrevorLine"; 1-866-488-7386) for lesbian, gay, bisexual, transgender, and questioning (LGBTQ) youth; and (3) the VCL, which is accessed by calling the National Suicide Prevention Lifeline and pressing "1." These organizations also offer chat- and text-based services.[3]

- The Lifeline is a network of 164 crisis centers in 49 states, 11 of which are in California.[4] A center can take calls from local lines and through the Lifeline's 800-number if it is part of the Lifeline network. Calls to the Spanish-language Lifeline are routed to one of ten national call centers, four of which are in California.
- The Trevor Project runs two call centers, in Los Angeles and New York City (and has one center to answer rollover calls).
- The VCL is run by the U.S. Department of Veterans Affairs (VA), and all calls are routed to a central call center at a

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Evaluation Results from RAND's Live Monitoring of Calls to California Crisis Centers

For full findings, see Rajeev Ramchand, Lisa H. Jaycox, Patricia Ebener, Mary Lou Gilbert, Dionne Barnes-Proby, and Prodyumna Goutam, "Characteristics and Proximal Outcomes of Calls Made to Suicide Crisis Hotlines in California: Variability Across Centers," *Crisis*, June 2016.

During the spring and summer of 2014, two RAND raters visited ten suicide prevention hotlines supported by CalMHSA to conduct live monitoring. Both raters visited the first two call centers to double-code calls (the call monitoring protocol and interrater reliability data are presented in Jaycox et al., 2015). Excluding the ratings of one of the reviewers from the sites that were double-coded, Rater A coded 180 calls and Rater B coded 61 calls. At each center, raters listened to calls across shifts over two to four days, and call responders knew that their calls could be monitored. All procedures were approved by RAND's Institutional Review Board.

An average of 24 calls were rated per center (range: 14–33 calls); raters monitored fewer than 20 calls at only one center. The RAND team evaluated the characteristics of the calls, the call responders, and proximal call outcomes.

Call characteristics

On average, a third of calls were from repeat callers, 57 percent of callers were women, and calls lasted an average of 14 minutes each. Seven percent of calls were put on hold, though no calls were put on hold at five of the centers. Thirteen percent of calls were from someone concerned about another individual (i.e., third parties). Just over half of all callers exhibited mental health or substance use problems. Other issues that were commonly mentioned were physical health challenges, interpersonal problems, and work, housing, and financial problems. Twenty-six percent of callers brought up suicide during a call, and 21 percent were thinking about taking their own lives.

Assessment of call responders

The National Suicide Prevention Lifeline recommends that all callers to suicide prevention hotlines be asked three questions as part of a suicide risk assessment: Sixty-nine percent of callers were asked about current suicide ideation, 25 percent were asked about recent ideation, and 21 percent were asked about past attempts. With respect to referrals, 30 percent of all calls required referrals. Of those requiring a referral, half were rated as being limited, in many cases because the referrals required were beyond the reach of counselors' typical knowledge, because resource guides were hard to navigate or out of date, or because there were no suitable community resources to meet callers' needs.

Call outcomes

On a scale of 1 to 5 (with 5 indicating high levels of satisfaction), RAND raters assessed the overall level of caller satisfaction as 3.4, with very little variability across centers (range: 3.2–3.9). Caller distress was assessed at both the beginning and end of the call: Just under half of callers experienced reductions in distress, and, in most of the remaining calls, there was no change.

VA facility in Canandaigua, New York. The VCL contracts with an organization that, in turn, contracts with other call centers to answer rollover calls. No California call centers currently answer VCL calls.

Suicide prevention hotlines also advertise their services to local markets and may advertise one or more telephone numbers. This does not mean that they will not take calls from outside a given geographic area, but they may focus marketing of their services within that region. The geographic scope varies: Among the suicide prevention hotlines that received support from CalMHSA, these regions range from less populated counties (e.g., Family Service Agency of Marin serves Sonoma, Napa, Lake, Marin, and Mendocino counties) to densely populated cities (e.g., San Francisco Suicide Prevention serves San Francisco and the surrounding area).

Californians Can Increasingly Reach Hotlines via Multiple Means

Organizations are increasingly offering the same services that they provide through their suicide prevention hotlines via other means—specifically, web-based chat or text messaging. In our survey of California adults, 46 percent said they would prefer a web-based chat platform, and 43 percent preferred to text a crisis line when seeking help for suicidal thoughts (Becker and Ramchand, 2014). At the time of our evaluation in 2013–2014, of the 12 suicide prevention hotlines supported by CalMHSA, three offered chat and text services, and an additional two offered chat but not texting. At the time of our evaluation, all of these services were offered at limited times or only on certain days of the week. In addition, the Lifeline offers 24/7 chat-based services through 29 centers in its network, though it responds to only around 50 percent of those who reach out via chat (see Grant, 2015). The Trevor Project offers text and chat services, but the days and times are limited.[5] The VCL offers both web-based chat and text messaging services 24/7. The Crisis Text Line offers text services 24/7 through a network of trained volunteers and paid staff responding from their private locations, mostly in the United States.

Call Volume Depends on Location, and the Urgency of Calls Varies

Most suicide prevention hotlines track and can easily report data on call volume, or how many calls are answered in a given time frame. Most recent estimates from the Lifeline indicate that it received approximately 1.5 million calls in 2015 (including calls received through the Spanish Lifeline and VCL), with almost 200,000 of these calls coming from California. However, there is variability across crisis centers with respect to call volume. Among the 12 suicide prevention hotlines that received CalMHSA support, a "small" hotline serving a rural area, such as the Family Services Agency of the Central Coast, may receive approximately 350 calls per month, but a larger operation, such

as San Francisco Suicide Prevention Crisis Line, may receive as many as 6,000 calls per month; call volume may be a function of the geographic area to which these services are marketed.

However, call volume does not equate to the number of unique individuals in distress, seeking a referral, or in crisis who call suicide prevention hotlines. Hotlines receive prank calls and calls in which the caller immediately hangs up; some crisis centers include these calls in their measures of call volume while others do not. Most hotlines also have "repeat" callers who are known to hotline staff and call regularly. Some centers encourage these brief, regular calls. In our evaluation, more than one-third (85) of the 241 calls we monitored were from repeat callers, loosely defined as someone the responder knew had called before. The proportion ranged across centers from no repeat callers to 72 percent of all monitored calls.

Finally, not all callers to suicide hotlines are at immediate risk of suicide. Of the 241 calls we monitored, five were deemed "urgent." In two of these cases, a caller asked for a mobile crisis unit to be sent to a scene; in two other cases, a caller expressed suicidal ideation and terminated the call abruptly; and in the final case, a caller had taken pills with the intent to take her life, and the call responder sent emergency personnel to the scene. Including these calls, only 21 percent of those we monitored were from callers who were currently thinking about suicide, a proportion consistent with other recent reports describing calls made to suicide prevention hotlines in California (see California Suicide Prevention Network, 2015).

The ability of call centers to collect this information varies, largely depending on the type of tracking system they use. Most call centers use some kind of electronic platform, but the sophistication of these systems varies. iCarol is a commercially available platform specifically designed to track data on calls placed to suicide prevention hotlines, and it was used by five of the ten suicide prevention hotlines that we evaluated. Other facilities used legacy systems they had built with database software, such as FileMaker or Microsoft Access, or had developed a custom system that they told us met their center's unique needs.

California Hotlines Are Staffed by a Mix of Paid and Volunteer Staff, and This May Affect the Quality of Services

At the time of our evaluation, three of the 12 CalMHSA-funded hotlines relied exclusively on volunteers, and nine relied on a mix of paid and volunteer staff. This mirrors staffing practices nationally: calls, chats, and texts to the Trevor Lifeline are answered by a mix of paid staff and volunteers, as are texts to the Crisis Text Line. On the other hand, calls, chats, and texts to the VCL are answered exclusively by paid staff (unless a backup call center staffed by volunteers fields a call).

Although they are not paid, volunteer staff who participate in clinical counseling, social work, or psychology training programs can often receive credit in the form of clinical practice hours (a requirement for receiving their degrees) for the time they

spend answering calls. Relying on volunteers to respond to crisis calls may reduce the cost of operating a hotline, but this must be weighed against potentially higher staff turnover and increased frequency of training.

Finally, the quality of a hotline's services may differ depending on whether it is staffed by paid or volunteer staff. In one study, the quality of care provided by volunteer call responders to callers at imminent risk of suicide was significantly lower than that provided by paid staff (Gould, Lake, et al., 2016). Other research examining the pros and cons of using paid staff versus volunteers to serve as community health workers found that the scope of work considered "reasonable" for a volunteer was much smaller than for paid staff and that programs using volunteers had to be more flexible with scheduling. The researchers concluded that "programs with intense intervention or significant data collection requirements may be better suited for the paid model" (Cherrington et al., 2010, p. 192).

Hotlines Are Funded in a Variety of Ways, Relying on Both Public and Private Support

The organizations that operate suicide prevention hotlines and received funding from CalMHSA are diverse, ranging from stand-alone service providers or call centers, like San Francisco Suicide Prevention, to programs housed in community mental health centers or other health care settings or mental health service agencies, like WellSpace Health or Didi Hirsch Mental Health Services. In addition, as discussed earlier, organizations that operate suicide prevention hotlines often engage in activities other than responding to incoming calls. As such, their funding can come from multiple sources, including local governments and private donors, and they may not disaggregate the costs associated with running the hotline from their other activities.

Of the crisis lines that received funding from CalMHSA, the majority had contracts with their local counties and cities but also received financial support through grants from foundations, other charitable organizations, and direct fundraising. Funding for two of the centers came almost exclusively from CalMHSA over the three years that grant funding was available: Family Service Agency of Marin, which operates a hotline serving several small California counties (Sonoma, Napa, Lake, Marin, and Mendocino), and Kings View, which used CalMHSA funding to establish the Central Valley Suicide Prevention Hotline serving Fresno, Kings, Merced, Mariposa, and Stanislaus counties. Some organizations that used CalMHSA funding to help run their suicide prevention hotlines faced challenges in obtaining ongoing support after their CalMHSA grant ended. For example, the *San Francisco Chronicle* reported that the Institute on Aging struggled to continue operating its Friendship Line after CalMHSA funding ended (Rubenstein, 2015).

Hotlines Often Collaborate or Form Partnerships

Suicide prevention hotlines may be integrated or partner in various ways. There are at least three types of integration:

(1) they may serve as backup call centers for other hotlines, (2) they may have formal relationships with other hotlines (e.g., domestic violence hotlines) to which they transfer calls, or (3) they may be members of the Lifeline.

Backup Call Centers

In certain cases, a crisis center may provide backup for another call center. As mentioned earlier, the VCL and Trevor Project's Lifeline both rely on backup centers to answer rollover calls. In addition, larger operations may provide backup to hotlines with smaller staffs. Among the hotlines receiving support from CalMHSA, the Family Services Agency of the Central Coast ran a small suicide prevention hotline staffed by one or two call responders per shift and received approximately 350 calls per month. Under a memorandum of understanding, San Francisco Suicide Prevention, an organization with six or seven call responders per shift that receives approximately 6,000 calls per month, serves as the agency's backup call center.

Formal Relationships with Other Hotlines

Hotlines that receive calls from distressed individuals on a regular basis sometimes partner with a suicide prevention hotline and develop formal protocols for transferring suicidal callers.

National Suicide Prevention Lifeline

Call centers in the Lifeline network receive calls from a single number (1-800-273-TALK). When a crisis center that operates a suicide prevention hotline joins the Lifeline, it generally selects the counties or regions from which it will take calls and offers to serve as a backup call center for a wider geographic area. Callers are routed to their nearest participating call center based on the call center's coverage area and the caller's originating area code. If the call is not answered immediately, it is forwarded to the backup call center and forwarded again until the call is answered. Regional call centers provide backup if no crisis center in the network is available to respond to a call, and these call centers get paid for each Lifeline call they receive.

Crisis centers must be accredited to join the Lifeline network. For their participation, they receive an annual payment of approximately $2,500 from the Substance Abuse and Mental Health Services Administration to offset operating costs. These crisis centers also gain access to the Lifeline members-only website, reimbursement for approximately one staff member per year to attend an ASIST Training for Trainers workshop (Osilla et al., 2015), and reimbursement for selected staff to attend conferences, such as the American Association of Suicidology annual meeting, in addition to tele-interpreting services and other benefits.

Challenges to Operating Suicide Prevention Hotlines in California

We identified three primary challenges that suicide prevention hotlines currently face or could face in the future that may affect their ability to meet the needs of California residents at risk of suicide: variability in the quality of the services they provide,

shifting telecommunication trends, and financial sustainability. Although we address each in turn, they are all related. Describing the ability of the National Suicide Prevention Lifeline to expand its crisis chat services in a recent magazine article, its director, John Draper, said, "We'd like to expand, but we can only stick our toes in because we don't have the funding to jump all the way in. Once we have scientifically based data that says, 'X number of people want chats, this is how effective they are, and this is how much they cost,' then we will see crisis chats become increasingly ubiquitous, but it could take 15 to 20 years" (Grant, 2015).

Variability in the Quality of Services

Although there is evidence that call responders generally develop good rapport with callers and that caller distress is reduced over the course of a call, research has shown deficits in the care that callers receive (Gould, Cross, et al., 2013; Gould, Kalafat, et al., 2007; Gould, Munfakh, et al., 2012; King et al., 2003; Mishara and Daigle, 1997; Ramchand, Jaycox, et al., 2016).

Call Responders Do Not Universally Adhere to Established Guidelines for Conducting Suicide Risk Assessments

Lifeline guidelines suggest that telephone responders ask a minimum of three questions to determine callers' current suicide ideation, recent ideation, and past suicide attempts, and all callers should be asked all three questions (Joiner et al., 2007; see NSPL, 2007, for the current guidelines). At the ten centers we visited as part of our evaluation, an average of 69 percent of callers were asked about current ideation, 25 percent were asked about past ideation, and 21 percent were asked about past attempts (though these proportions were significantly higher for call centers that were part of the Lifeline network; see Ramchand, Jaycox, et al., 2016). Past evaluations of calls made to suicide prevention hotlines have reported similar rates (Gould, Munfakh, et al., 2012; Mishara et al., 2007).

There Are Gaps in the Quality of Referrals to Other Sources of Support

Repeat callers and others who call suicide prevention hotlines may not need referrals: Many are already receiving mental health care and other services. Of the 241 calls we monitored, 70 percent of callers did not require referrals; however, of the 30 percent who did, half of the referrals provided were rated as "limited," either because the referrals needed were beyond counselors' typical knowledge or the center's resource guides were limited, or because no such service existed (Ramchand, Jaycox, et al., 2016). In a separate study that followed up with callers, Gould, Munfakh, et al. (2012) found that approximately half of callers given mental health referrals utilized mental health services after the call, with more callers accessing mental health resources that they had used previously than accessing new resources to which they were referred by the call responder. This may be due to caller preference, but it may also be because suicide prevention hotlines have referred callers to resources that they cannot access (e.g., due to capacity constraints, such as a lack of available inpatient beds) or because callers are ineligible for the services (e.g., lacking necessary insurance coverage).

There Is Variability in Quality Across Call Responders and Call Centers

Several studies have noted that variability across call responders affects the quality of care that callers receive—specifically, call responders' behavior or engagement with callers (Mishara et al., 2007; Mishara and Daigle, 1997; Mishara, Chagnon, and Daigle, 2007), their training (Gould, Cross, et al., 2013), and whether they are paid staff or volunteers (Gould, Lake, et al., 2016). There is also variability across centers, as highlighted in our own evaluation. For example, although all crisis centers we visited were accredited by the American Association of Suicidology, there was wide variability in adherence to the Lifeline suicide risk assessment standards (NSPL, 2007): from 13 to 100 percent for current ideation, 4 to 77 percent for past ideation, and 0 to 60 percent for past attempts. Not only were hotlines that were part of the Lifeline network more likely to adhere to risk assessment standards, but they also had an independently higher likelihood of decreased caller distress over the course of a call (Ramchand, Jaycox, et al., 2016).

Shifting Telecommunication Trends

The landscape in which suicide prevention hotlines operate both in California and nationally is primarily geographically oriented: Hotlines are funded by the cities and counties they serve, they promote and receive calls through local telephone numbers, and some are affiliated with local health systems. In addition, the Lifeline routes callers and those accessing its chat service to the nearest crisis center (based on their area code or IP address), in accordance with crisis centers' agreements with the Lifeline. Such a geographically focused system is thought to benefit callers because responders will have knowledge about the local resources available to callers and the local geography, facilitating better and faster dispatches of emergency personnel to crisis scenes.

Although California adults reported preferring to reach out to a hotline over web-based chat or text messaging if they felt suicidal (Becker and Ramchand, 2014), general communication patterns suggest a shift toward a preference for chat and text over traditional phone-based communication, particularly among younger Americans (Pew Research Center, 2015). However, as mentioned earlier, few organizations currently offer these options, likely because the costs of providing chat and text services are significant (Grant, 2015). The organizations that do offer these services tend to do so at limited times or only on certain days, and evidence suggests that demand for such services outpaces supply. For example, the Lifeline is able to respond to only half of the chat requests it receives (Grant, 2015). The Crisis Text Line no longer routes callers to nearby responders, opting to route callers to the next available text responder based on an internal audit of texters' preferences for speed of response and anonymity over geographic proximity.

In addition to the growing preference for chat and text services, callers increasingly rely on mobile phones over landlines, a shift that threatens the geographic focus of most suicide prevention hotlines. In 2013, 33 percent of California adults and 38 percent of children lived in households with mobile telephones only (Blumberg et al., 2013, p. 5). Furthermore, the area code of a person's originating mobile phone number does not necessarily serve as a good proxy for their current residence, because numbers can move with a person. Recent data suggest that 90 percent of cell phones with a California area code are owned by someone who lives in California, but only 60 percent of California residents with cell phones have a California area code (Tao et al., 2013). At the regional level, these rates are almost certainly lower. For example, fewer people living in Los Angeles are likely to have a Los Angeles area code, though they may have a California area code. The implication is that callers to the Lifeline will not necessarily be routed to the call center that is physically closest to them but, rather, to a call center in or near the location of their cell phone's area code. While this might suggest a need to promote local hotline numbers over the national, toll-free Lifeline, the financial precariousness of local call centers increases the chance that a call will go unanswered—something that is less likely to happen when calling the Lifeline.[6]

Financial Sustainability

Crisis centers rely on multiple sources of funding to sustain their operations, including public funds from federal, state, and local governments, along with private grants and donations. The assurance of continued funding for an individual center varies. While nine of the ten centers where we monitored calls had been operating for 35 years or more, we were told that CalMHSA funding in 2011 "saved" a suicide prevention hotline in California that had lost its traditional sources of funding (which came largely from a local private foundation), and, as mentioned earlier, the Institute on Aging's Friendship Line was at risk of closing after its CalMHSA funding ended. Similar situations are occurring nationally. For example, in 2015, the U.S. Department of Defense did not renew its contract with Vets4Warriors, a peer-based phone line for service members (Philipps, 2015).[7]

One question that arises when a suicide prevention hotline shuts down is how to keep local numbers active that have been marketed to the public and through which the hotline has received incoming calls. Ideally, the local number will be absorbed by another crisis center that already receives these types of calls. However, taking ownership of the line comes at a cost: More calls may be placed on hold or go unanswered, and operating expenses may increase as well. In the worst case, the number is disconnected and ultimately repurposed for an unrelated service or business. Callers who attempt to call the number may not seek out an alternative hotline or other resource and thus may not receive the support they need.

Recommendations

In light of the challenges we observed, we offer four primary recommendations. These recommendations are particularly relevant for organizations that operate suicide prevention hotlines. However, organizations and agencies that fund or otherwise support suicide prevention hotlines, as well as those that oversee their operations (i.e., accrediting agencies), could use these recommendations to guide or otherwise inform funding priorities or requirements. Our recommendations are: (1) conduct continuous quality-improvement activities, (2) promote hotlines that are integrated with health care systems, (3) increase the availability of high-quality chat and text services, and (4) increase referral competency through a statewide referral system, call centers with specialized content areas, or improved training for call responders.

Although we do not highlight them specifically, each recommendation comes with significant costs. For example, increasing the availability of chat and text services will require upfront hardware and software costs, as will the creation and maintenance of a statewide referral directory. Formalized procedures for continuous quality improvement and integration with health systems may also come with increased accountability and potential liability. This could, in turn, lead to an increased dependence on paid staff over volunteers and a need for insurance, all of which could increase the costs of operating existing lines. Thus, we make a final recommendation that identifies research priorities and emphasizes the need to pursue research that examines the actual or predicted effects of adopting our recommendations.

Conduct Continuous Quality Improvement

Continuous quality improvement is defined as "the process-based, data-driven approach to improving the quality of a product or service" (Mittman and Salem-Schatz, 2012). We recommend that the focus on continuous quality improvement not be limited to suicide prevention hotlines; rather, efforts should include all hotlines that may receive a call from a suicidal individual. This means that an entity (for example, the state, counties, the California Suicide Prevention Network, or individual crisis centers) should identify all call responders who may come in contact with a suicidal caller, ensure that each responder has the necessary core competencies for handling a suicidal caller, and establish a protocol for continuously monitoring call responders' behaviors.[8]

Identify All Call Responders Who May Come in Contact with a Suicidal Caller

Distinctions between suicide prevention hotlines, warmlines, ACCESS lines, and other hotlines may be apparent only to funders, policymakers, and those operating these lines—not to the public. An entity should identify responders who interact with suicidal callers, whether through an accredited suicide prevention hotline, a nonaccredited suicide prevention hotline, a 911 call center, or any other hotline. This entity could also establish requirements for these responders and for hotlines with respect to training, operations, and continuous monitoring.

Funders and policymakers may want to promote blended call centers, which help ensure that suicidal callers who call any type of crisis hotline can be routed to responders who are equipped to handle such calls.

Establish Core Competencies for Handling Suicidal Callers
Although not all suicide prevention hotlines are part of the Lifeline, and responders who do not work for suicide prevention hotlines may also come in contact with suicidal callers, the Lifeline guidelines are a starting point for establishing core competencies. The Lifeline has published core competencies on screening for suicide risk (Joiner et al., 2007) and for identifying and helping callers at imminent risk of suicide (NSPL, 2010). Other organizations, such as the Association of Public-Safety Communications Officials–International (APSCO-International), provide standards for telecommunicators, supervisors, instructors, and managers who are responsible for government-sponsored public safety communication (e.g., law enforcement, fire departments, highway maintenance), as well as certifications for agencies' own training programs. APSCO-International is an American National Standards Institute accredited standards developer and could serve as a model for the American Association of Suicidology or other accrediting bodies.

In addition to these specific competencies, call responders should have training in effective communication strategies that draw from evidence-based approaches, like motivational interviewing. Many calls to crisis lines are from repeat callers who want nonspecific support or from callers with mental health problems, and there are opportunities to employ these simple evidence-based techniques even during short phone calls. Motivational interviewing techniques can be used to help callers identify their goals and be more receptive to referrals that might help them achieve those goals (Miller and Rollnick, 2012) and trainings with lay persons can be effective and last as little as four hours (Madson, Loignon, and Lane, 2009; D'Amico et al., 2012). As another example, call responders could encourage depressed callers to engage in pleasant activities (Dimidjian et al., 2011) or to critically evaluate the specific problematic depressive thinking (Beck et al., 1979) that is getting in their way. These concrete, specific, evidence-based methods could promote better mental health for these noncrisis callers and pave the way for treatment seeking and increased receptivity to referrals.

Establish a Protocol for Continuous Monitoring
Although all 12 of the crisis centers that received funding from CalMHSA were accredited, only two conducted two-way live monitoring (i.e., with a trainer or supervisor listening in real time to both sides of a call), and none recorded calls. At most other centers, supervisors were able to sit beside call responders and thus heard only the call responder's side of the conversation. Such quality assurance processes could be dramatically improved. Furthermore, in light of the high levels of staff turnover at hotlines (due to a reliance on volunteers), a continuous quality improve-ment program might make more sense than periodic evaluations of call responders' performance.

Recording calls is a good way for call centers to continuously assess the quality of the services that a hotline is providing. In conversations with two call center directors who record calls outside of California, we were told that the recordings are useful to call responders and supervisors in discussing challenging calls, and supervisors can listen to recorded calls if callers call back to complain about the care they received. In addition, recorded calls are often used for training purposes, and responders are recorded early in their training to acclimate them to these standard operating procedures. To record, California law requires that callers be notified that the call is being recorded, and some call centers may be concerned that such a notification would lead to increased hang-ups. As part of our evaluation, responders informed callers that the calls were being monitored. In no case was there evidence of increased hang-ups due to the monitoring, similar to the finding in another evaluation of suicide prevention hotlines (Mishara et al., 2007).

Promote Suicide Prevention Hotlines That Are Integrated with Existing Health Care Systems
Californians' access to suicide prevention hotlines and hotline callers' access to needed mental health and emergency services might increase with greater integration with existing health care systems in the community. Integration with emergency departments and trauma centers, staff-model HMOs (e.g., Kaiser Permanente), county behavioral health services departments, and colleges and universities may all be options, and such relationships already exist both within California and nationally. Although integrating services may require careful consideration of technical, staffing, and legal issues (e.g., patient privacy), benefits of integration include providing call responders with more information about callers' current service utilization and the availability of referral services within the health care system that callers could access, as well as the ability to arrange follow-up care for patients after discharge or between appointments.

Access to Callers' Medical Records
With callers' permission, responders at the VA-run VCL can access the medical records of callers who are receiving care through the Veterans Health Administration. With such access, call responders can monitor callers' adherence to treatment plans, know what (if any) pharmacotherapy they are receiving, or determine the date of their last visit to a mental health provider and the date of their next appointment. In addition, call responders can indicate that a patient called the suicide prevention hotline on the patient's medical record, and providers can follow up with the patient at his or her next appointment, thus enhancing continuity of care. If appropriate, VCL call responders can alert medical providers directly of callers' dispositions during a call or help make an appointment for the caller. This may be especially

important for repeat callers, who may be using the hotline for comfort and support in between appointments.

Known Eligibility and Availability of Services
As discussed earlier, callers may not access resources to which they are referred because of a lack of capacity or eligibility. Call centers that are integrated with health care systems can help ensure that callers can access the resources they recommend. This does not necessarily require access to a hospital or other administrative database. For example, VCL responders generally provide referrals to the callers' nearest regional suicide prevention coordinator. (Each of the 153 VA medical centers has such a coordinator.) It is then the coordinator's responsibility—not the call responder's—to identify the most appropriate referral resources in the community, including those offered by VA and other local agencies, depending on the caller's eligibility for VA services. In interviews with VCL call responders, most indicated that callers were very receptive to responders accessing their medical records and connecting them with their local VA suicide prevention coordinator (Engel et al., under review). However, VA's program has not yet been subject to a formal evaluation, and it is not clear whether this model increases referral uptake compared with other strategies.

Aftercare
As mentioned, suicide prevention hotlines may partner with local emergency departments to follow up with high-risk patients after a mental health–related hospital discharge; these practices have been found to delay or prevent reattempts (Ghanbari et al., 2016; Luxton, June, and Comtois, 2013) and have a positive return on investment (Richardson, Mark, and McKeon, 2014). Such partnerships already exist in California: In Santa Clara County, where the suicide prevention hotline is part of the department of mental health and located on the county hospital campus, call responders walk to the emergency department discharge office to meet patients, give them hotline phone numbers, and arrange for telephone follow-up. In December 2015, the Substance Abuse and Mental Health Services Administration announced that it would offer three-year grants to six call centers nationwide to provide similar services.

Increase the Availability of High-Quality Chat and Text Services
Current demand for chat- and text-based crisis support outpaces supply (Grant, 2015). In our evaluation, we found that only a few of the centers that received funding from CalMHSA provided such support, and among those that did, the availability of these services was limited. The national Crisis Text Line meets some of this demand, but not for chat-based crisis support. To accommodate consumer preferences, such services need to be expanded—carefully and strategically. Importantly, chat and text should not necessarily be stand-alone services. Predmore and colleagues (under review) found that responders at the VCL who fielded

chats, texts, and phone calls prefer that chats lead to a phone call, in which call responders could better pick up on callers' verbal cues or collect information to enable more-appropriate or immediate referrals. In addition, at this critical juncture, funders, policymakers, and government officials have the opportunity to reconsider the benefits and pitfalls of promoting multiple text numbers and chat portals versus a single text line or portal.

Increase Referral Competency
Our evaluation of suicide prevention hotlines in California indicated that the quality of referrals could be improved; we found that these limitations were the result of questions beyond call responders' typical knowledge or resource guides that were hard to navigate or that lacked referral options for a requested service. Callers have diverse needs, and to best meet these needs, responders must have vast amounts of knowledge about the range of potential resources—from mental health and substance abuse treatment to programs for those experiencing economic hardship and homelessness. We offer two recommendations to overcome this limitation:

- *Develop a centralized resource directory.* Shifting telecommunication patterns suggest that callers to the Lifeline may not be routed to the suicide prevention hotline in the region where they are located if they are calling from a mobile telephone with a different area code. In addition, call responders may know generally what services are available in their region but not whether they are available to callers immediately. A centralized, online directory could address this limitation and ensure that responders can provide callers with up-to-date information on available and appropriate services and resources.
- *Establish and promote call centers with specialized focus areas.* The Trevor Project, the Institute on Aging's Friendship Line, and the VCL are examples of hotlines that provide specific services to specific populations (LGBTQ youth, the elderly, and veterans, respectively). Aside from the Institute on Aging, the other hotlines supported by CalMHSA provide general services to all populations. Creating call centers with specific areas of specialty—for example, homeless populations or issues surrounding unemployment—may enhance the referrals that hotlines could provide. A well-established network of call centers could facilitate transfers to centers specializing in a caller's specific problem and lead to more-targeted recommendations for support.

Continue to Collect Data to Pursue Research Priorities
Further research is needed to continue enhancing the care provided to users of suicide prevention hotlines. This will require refinements to existing accounting procedures, as well as collecting new data from hotlines and other entities. We identified three priority areas for research.

Determining Need for and Access to Suicide Prevention Hotlines and the Capacity to Meet the Demand for These Services

As mentioned earlier, it is critical to identify the need (or demand) for suicide prevention services, the organizational capacity (or supply) of these services, and the rate at which callers access and use these services. Estimating demand will require aggregating data from multiple sources, including medical examiners, emergency departments, population-based surveys, and law enforcement. Also critical, however, is measuring capacity. This requires suicide prevention hotlines to monitor call volume consistently (i.e., treat hang-ups and prank calls in the same way) and to track the number or proportion of calls that are placed on hold or go unanswered. This is particularly important for requests for chat and text services, given the large number that currently go unanswered. Finally, studies are needed to continue to understand awareness of and barriers to using services offered by suicide prevention hotlines.

Strategies for Enhancing Caller Outcomes

In 2014, the National Action Alliance for Suicide Prevention (NAASP) produced *A Prioritized Research Agenda for Suicide Prevention*. It includes among its prioritized long-term research objectives "Reduce suicide attempt and death outcomes through multiple, synergistic components of quality improvement within and across responsible systems" and "Sustain effective quality improvements" (NAASP, 2014, p. 13). Current evaluations document variability in the quality of services offered by suicide prevention hotlines (Ramchand, Jaycox, et al., 2016) and by the individual responders who work for them (Gould, Lake, et al., 2016). In light of the NAASP's call for research on quality of care, continued study is needed to document which services specifically relate to improved outcomes, with respect to either call responder behaviors (e.g., Gould, Cross, et al., 2013) or call outcomes (e.g., Mishara et al., 2007). Researchers should specifically pay attention to the provision of referrals and, more challenging, uptake of these referrals by callers. Although efforts to re-contact callers after they place a call have yielded relatively low follow-up rates (e.g., Gould, Munfakh, et al., 2012), hotlines with connections with established health systems, like the VCL, could contribute to this literature by documenting the outcomes of callers referred to suicide prevention counselors and the characteristics of "successful" versus "unsuccessful" referrals.

Establishing the Business Case

As mentioned earlier, each recommendation we make to improve the care callers to suicide hotlines receive comes with associated costs. However, with the exception of one study (Richardson et al., 2014), we found no model of the costs associated with operating a suicide prevention hotline. Because of how they are structured within existing organizations, the suicide prevention hotlines in our study had difficulty providing us with this information. More research is needed to estimate the return on investment of adopting new strategies to improve care. This can be done by evaluating new services when they are incorporated into existing practices or by modeling the potential effects before adopting new services. This is especially important for the funders of these hotlines (e.g., government, private foundations, private donors), who may be asked to increase funding amounts so that hotlines can enhance their practices. Such analyses may also create opportunities to identify new funders, including health systems that may see a benefit from partnering with suicide prevention hotlines to provide aftercare and follow-up calls.

Conclusion

The landscape in which suicide prevention hotlines operate in California is characterized by funding pressures, shifts in technology usage, and other factors that make it difficult to target at-risk populations with the suicide prevention resources they need. In our evaluation, we found varying levels of adherence to guidelines for interacting with callers and potential knowledge gaps in call responders' referrals and resource recommendations, though interactions between callers and responders were generally positive. Formal statewide partnerships, like the California Suicide Prevention Network, could target and develop strategies to mitigate some of these limitations at the local level.

Our evaluation also revealed uncertainty about whether suicide prevention hotlines are meeting the needs of at-risk populations in California. However, to date, there have been no statewide studies assessing the need for suicide prevention hotlines or the capacity to meet these needs using the types of data collected by call centers. Our evaluation included a survey of California residents' preferences for seeking help for suicidal thoughts. However, more research is needed to identify the reasons for these preferences, as well as barriers and facilitators to seeking help. Such studies could include surveys to determine public awareness and perceptions of hotlines and other crisis resources.

Finally, several California hotlines participate in the National Suicide Prevention Lifeline network or are part of blended call centers that field a range of crisis and noncrisis calls from multiple local numbers. These strategies may offer better support to callers by leveraging resources and expertise. They may be particularly important when it comes to planning for the long-term financial sustainability of a hotline and ensuring that callers at risk of suicide receive accurate information and appropriate support that improves the likelihood that they will seek and receive the help they need.

Notes

[1] One of the 12 crisis centers refused to participate in the evaluation, and another was run by the county and did not provide the necessary approvals in time for us to conduct the evaluation.

[2] The Bay Area Suicide and Crisis Intervention Alliance consists of six agencies that operate 24-hour crisis lines serving Alameda, Contra Costa, Marin, Monterey, San Benito, San Francisco, San Mateo, and Santa Cruz counties. The California Suicide Prevention Network began with CalMHSA funding as a consortium of 11 California crisis centers. Its goals were to build partnerships, identify community needs, develop and disseminate resources and promising practices, build local capacity through staff training, improve and standardize data-collection efforts, and implement effective strategies to prevent and reduce suicide in California.

[3] The Crisis Text Line is a dedicated text-based service and is described in the next section.

[4] According to the Lifeline website as of May 2016 (see NSPL, undated).

[5] At the time of this research, the Trevor Project's Lifeline offered text services on Thursdays and Fridays from 4:00 p.m. to 8:00 p.m. Eastern and chat services seven days a week from 3:00 p.m. to 9:00 p.m. Eastern.

[6] A recent report by the VA Office of the Inspector General found that calls to the VCL that were routed to backup call centers went unanswered or were sent to voicemail. According to the report, "When VCL management investigated these complaints, they discovered that the backup call center staff were not aware the voicemail system existed; thus, they did not return these calls" (U.S. Department of Veterans Affairs, Office of the Inspector General, 2016).

[7] The state of New Jersey, where Vets4Warriors operates, offered to sustain the line for a year while it seeks alternative funding.

[8] In addition, it may be worth considering core competencies other than suicide prevention that should be familiar to all crisis lines, including issues relating to intimate partner violence, sexuality, and financial distress.

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