

The logo features a vertical column of ten small red dots on the left. To the right of the dots is a large orange square. A dark red horizontal bar is positioned above the top of the orange square. The text 'WICHE CENTER FOR RURAL MENTAL HEALTH RESEARCH' is written in a dark red serif font across the orange square.

WICHE
CENTER FOR RURAL
MENTAL HEALTH
RESEARCH

THE WICHE CENTER FOR RURAL MENTAL
HEALTH RESEARCH IS
SUPPORTED BY THE FEDERAL
OFFICE OF RURAL HEALTH POLICY, HEALTH
RESOURCES AND SERVICES ADMINISTRATION
(HRSA), PUBLIC HEALTH SERVICES

Addressing Suicide Potential and Prevention in Rural and Frontier Areas: Suicide Prevention Toolkit for Rural Primary Care Providers

Mimi McFaul, Psy.D.
Jim Ciarlo, Ph.D.
Jean Demmler, Ph.D.
Christa Smith, Psy.D.
Tamara DeHay, Ph.D.

August 2009
Summary Report

Western Interstate Commission for Higher Education
Mental Health Program
3035 Center Green Drive
Boulder, CO 80301

Acknowledgements: The WICHE Center for Rural Mental Health Research is one of seven Rural Health Research Centers supported by the Federal Office of Rural Health Policy (ORHP), Grant No.1 U1CRH03713-01. This project is funded by ORHP, Health Resources and Services Administration, U.S. Department of Health and Human Services. The specific content of this article is the sole responsibility of the authors.

Dr. McFaul is currently the Associate Director for the WICHE Mental Health Program. Dr. Ciarlo is the Senior Research Scientist for the WICHE Mental Health Program. Dr. Demmler is a consultant for the WICHE Mental Health Program. Drs. Smith and DeHay are post-doctoral fellows with the WICHE Mental Health Program from the University of Colorado, Denver, Department of Psychiatry.

Executive Summary

Suicide rates in rural areas are significantly higher than they are in urban areas for men of all ages and for young women.^a Research shows that many people visit their primary care physician instead of a mental health provider for mental health problems. Up to 88% of patients who die by suicide had contact with their primary care physician (PCP) at some point during the year prior to their suicide and up to 66% had contact with their PCP during the month prior to their suicide.^b These same individuals saw a mental health professional less than half as frequently as they saw a PCP in the year and month prior to their suicide.^c Physicians, as well as other primary care providers, such as physicians assistants and nurses, are uniquely positioned to provide care that can reduce death by suicide and the suffering it cause in rural communities. Yet, primary care providers of all types receive little guidance and support for suicide prevention and they do not receive reimbursement for interventions with suicidal patients.

This project was completed in two distinct phases. The first phase, the statistical phase, was designed to develop a means to identify rural counties at high risk for suicide. This methodology, described in the full report, could then theoretically be used to inform targeted rural suicide prevention efforts in primary care with the product developed in the second phase of this project. The calculations were applied to four states with the suicide rates higher than the national average as determined by the Center for Disease Control and Prevention (CDC). Data on the highest-suicide risk rural counties were identified for the four states to better identify the need among and between rural areas.

The primary product resulting from the second phase work is a Suicide Prevention Toolkit for Rural Primary Care Providers. The purpose of the Toolkit and the related webcast (available for asynchronous viewing) is to provide the education and support needed to identify and address the critical needs of suicidal patients. The toolkit brings best practices in suicide prevention to providers in their own community and offers them tools for improving their detection and intervention skills with suicidal patients. The toolkit also includes a system for developing an office protocol which details specific actions to be taken when a suicidal patient is identified, making suicide prevention a collaborative effort undertaken by the entire primary care office. In addition, the toolkit provides resources for educating and engaging the public in suicide prevention, thereby calling to action not just health care providers, but the communities they serve.

Contents

Executive Summary 3

Introduction..... 5

Phase One 6

References..... 12

Phase Two..... 13

Discussion and Policy Implications 23

Appendix 26

Introduction

Rural Suicide and Primary Care

More than 32,000 deaths by suicide occur each year in the U.S.^d. Suicide rates in rural areas are significantly higher than they are in urban areas for men of all ages and for young women.^e Research shows that many people visit their primary care physician instead of a mental health provider for mental health problems. Some of these mental health problems, such as depression, can lead to suicide. Up to 88% of patients who die by suicide had contact with their primary care physician (PCP) at some point during the year prior to their suicide and up to 66% had contact with their PCP during the month prior to their suicide.^f These same individuals saw a mental health professional less than half as frequently as they saw a PCP in the year and month prior to their suicide.^g What this data tells us is that physicians, as well as other primary care providers, such as physicians assistants and nurses, are uniquely positioned to provide care that can reduce death by suicide and the suffering it causes in rural communities. Yet, primary care providers of all types receive little guidance and support for suicide prevention and they do not receive reimbursement for interventions with suicidal patients.

The purpose of the Suicide Prevention Toolkit for Rural Primary Care Providers and the related webcast is to provide the education and support needed to identify and address the critical needs of suicidal patients. The toolkit brings best practices in suicide prevention to providers in their own community and offers them tools for improving their detection and intervention skills with suicidal patients. The toolkit also includes a system for developing an office protocol which details specific actions to be taken when a suicidal patient is identified, making suicide prevention a collaborative effort undertaken by the entire primary care office. In addition, the toolkit provides resources for educating and engaging the public in suicide prevention, thereby calling to action not just health care providers, but the communities they serve.

A Phased Approach

This project was completed in two distinct phases. The first phase, the statistical phase, was designed to develop a means to identify rural counties at high risk for suicide. This methodology could then theoretically be used to inform targeted rural suicide prevention efforts in primary care with the product developed in the second phase of this project. The product of the second phase work is a Suicide Prevention Toolkit for Rural Primary Care Providers. The specifics of these two project phases are described below.

Phase One

Project Phase One: Calculating Suicide Risk for Rural and Frontier Counties

Objectives of Initial Statistical Work on Suicidal Risk

The primary objective of this project phase was to develop a means of identifying those rural counties in which risk of suicide among primary care patients was at or near the upper end of the range of such suicide risk rates in all rural counties in the United States. An effective method of determining these higher-risk counties was needed to allow us to select a number of locations in which to try to implement the suicide-prevention procedures for rural primary-care settings being developed in this project's second phase.

In earlier statewide interview work with Colorado's general population (Ciarlo et al, 1992; Tweed & Ciarlo, 1992) the investigators had already identified epidemiologic demographic factors—e.g. poverty, gender, and marital status-- associated with higher rates of mental illness, and subsequently also with rates of suicidal ideation, intention, and attempts. These demographic factors were later used to calculate projected suicide-risk rates for different Colorado sub-areas participating in the Colorado Trust Preventing Suicide in Colorado Initiative (Ciarlo & Demmler, 2006). Rurality also entered these predictive equations for Colorado-area suicide risk estimates that had been based on population-survey interviews, and in a direction that *reduced* rural-area suicide risk relative to urban areas. Although this project did not focus only on Colorado, the investigators on this portion of the project (James A. Ciarlo, Ph.D. and Jean Demmler, Ph.D.) were involved with previous studies in Colorado and therefore, were familiar with the need to expand upon earlier studies. Furthermore, the investigators on this portion of the project (Ciarlo and Demmler) knew of no studies which had produced methods and variables that would effectively estimate the differential magnitude of actual suicide risk in **county-level rural** areas, the primary focus of this suicide-prevention project for rural primary medical caregivers.

Accordingly, we had proposed to collect *actual suicides* data from rural counties (obtained from county coroners and state/county health departments), and then use county-level demographic and available health statistics to develop predictive equations that would measure the differential suicide risk rates for rural counties. We would then use these predictive-equation results to rank-order these rural and frontier counties in terms of their predicted suicide risk, in order to allow us to select high-risk primary-care settings in which to develop and implement our proposed suicide-prevention procedures and tools.

Considerable early effort was put into identifying and developing databases of useable demographic and health-statistics information for rural counties, as well as for urban counties in the same regions to allow for cross-validation of our predictive risk equations in both types of Ambulatory Medical Care Survey settings, as was requested by ORHP. Such data sets included county-level U.S. Census data, American Community Surveys, National Violent Death Reporting System, National Ambulatory Medical Care Survey, National Hospital-based Ambulatory Medical Care Survey, state Medicare and Medicaid claims files, various state mental

health services statistical reports, and special surveys of selected states covering clinical depressive and other dysfunction assessments. Work also was done to search out states that had sufficient numbers of rural counties to allow for statistical reliability and variability in county-level suicide rates that would be needed to permit valid prediction equations for counties' relative suicide risk levels. The funding agency had requested that these states come from four U.S. regions, and accordingly work went into searching out those states most likely to have the necessary numbers and different types of counties required for collecting the data needed for such analyses.

Key Changes Permitted by Availability of National Suicide Data

Unexpectedly, in our second project year, and before we had begun collection of actual suicide data from the rural and urban counties of four different states, we were fortunate to learn of the Mortality Cause of Death Files available from the National Center for Health Statistics operated by the Center for Disease Control and Prevention (CDC). Permission was requested and obtained to access these mortality data, which included suicides, covering all U.S. states and territories, with summary statistics for all counties with populations of 100,000 or more. And although this aggregation of suicide data for only such large counties could not meet our research needs for suicides in small rural and frontier counties, we were able with considerable effort to use this data set's individual-cases data, aggregating these ourselves in order to obtain the needed rural county-level suicide data for comparative risk analyses.

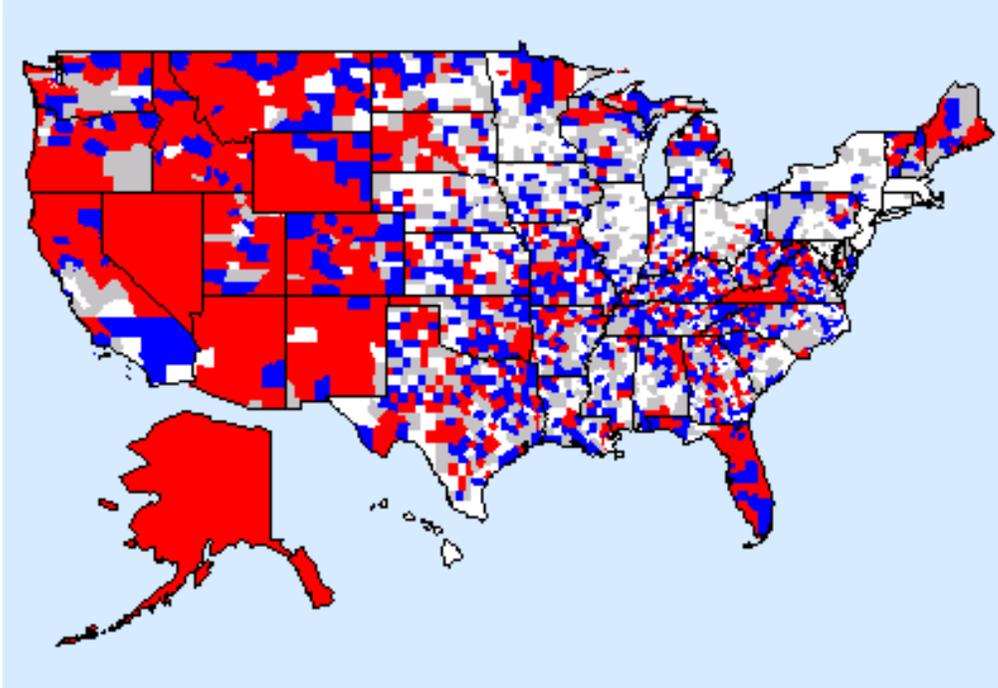
Given the availability of suicide data for all U.S. states, there was no need to attempt to develop valid *predictive* suicide-risk equations for either rural or urban areas; those risk levels could now be based on *actual suicide* data over a recent five-year period.(2001-2005). Any differences in types of counties, different states, or different U.S. regions could now be determined by anyone having interest in, and access to, these Mortality Cause of Death files. What this project could now do was to work to extract multi-year, stable suicide statistics for rural and frontier counties, compute their actual-suicide occurrence rates, and then rank those rural counties in terms of their now clearly documented suicide risk levels.

Selection of States

We accordingly focused on choosing states with two key characteristics: (1) having adequate numbers of rural and frontier counties with primary medical care personnel and facilities available for this project (e.g., offices or clinics), and (2) having rural and frontier counties with high suicide risk levels as calculated from the national suicide data described above. We identified rural and frontier states with the above characteristics, and then selected those states with which WICHE already had established research working relationships, as this would be crucial in obtaining access to and support of the primary-care settings for future implementation of the suicide prevention toolkit. Four of these states had 2004 crude (i.e., not age-adjusted) suicide rates calculated by the CDC well above the national average of 11.05 suicides per 100,000 residents: Alaska (23.6), Colorado (17.3), Oregon (15.5), and South Dakota (14.5)—see website webappa.cdc.gov/cgi-bin/broker.exe. We also considered working in rural counties from Massachusetts, which despite its fairly low suicide rate (6.6) was a promising state partner in terms of WICHE working relationship and interest in this project. It was also an Eastern-region state having potentially interesting cultural differences from rural Western states in primary-care

mental health-oriented work, given that the majority of higher-risk counties were from such Western states, as shown below.

Map of Suicides by County



<http://www.cdc.gov/npcd/maps/default.htm>

- Red 75th national percentile
- Blue 50th national percentile
- Gray 25th national percentile
- White <25th national percentile

Selecting Rural and Frontier Counties for Suicide Risk Calculation

The “rural” and “frontier” focus of this primary care suicide prevention project required a technique for selecting counties for comparative risk assessment and subsequent potential involvement in our suicide-prevention efforts. The Mortality Cause of Death files already contained a dichotomous “metropolitan-nonmetropolitan” code that would have been simple to use. However, that non-metropolitan category could not identify the rural and frontier-area counties needed in this research. In addition, the ORHP sponsor had requested that a continuum of rurality be utilized in determining suicide risk levels for purposes of this research.

Accordingly, we considered three schemas for assessing counties along a continuum of rural versus urban. These included (a) the 2003 Urban Influence Codes; (b) the 2003 Rural-Urban Continuum Codes, or RUCC; and (c) the 2000 Rural-Urban Commuting Areas (RUCA). Of course, each of these urban-rural continuum code systems could also be collapsed into metropolitan and nonmetropolitan categories if desired; however, this project was focused only upon the most strongly rural end of these continua and hence most “nonmetropolitan” counties had to be excluded.

After reviewing all three code systems and their previous research applications, we selected the 2003 Rural-Urban Continuum Codes system for characterizing project counties. One primary reason for this choice was our desire to avoid selecting counties whose rural residents would be able to either access mental health caregivers via private transportation to nearby urban or large rural counties and towns, or whose medical primary medical caregivers could readily obtain professional mental health consultation and/or service from adjacent counties possessing greater mental health resources. The Urban Influence Code system had two categories (11 and 12) that appeared to match up initially with our rural/frontier county focus (i.e., counties not adjacent to either metropolitan or “micropolitan” counties). However, the RUCC system used codes with not only that name non-urban, non-adjacency capacity (e.g., code 9) but also allowed for somewhat larger county populations (i.e., code 7---2,500 to 19,999 “urban” persons) that still had no direct access to mental health services in adjacent metropolitan or “micropolitan” areas. Colorado’s state demographer Richard Lin, a consultant to our previous research focusing on rural/frontier areas, also supported the choice of the RUCC system that would use codes 7 and 9 to select rural and frontier areas for this study. Lin noted that this system, utilizing the long-used definition of “urban” as “any population, housing, and territory located within incorporated places of 2,500 or more” was by far the easiest, simplest, and most straightforward to implement, requiring no calculation of population density, workplace employment and commuting data, or other complex factors.

Procedures for Calculation of Suicide Risk for Potentially Participating Counties

As indicated above, all counties in the five potentially collaborating states that were characterized by RUCC codes 7 and 9 were candidates for calculation of actual suicide risk over the period 2001-2005, using the CDC’s Mortality Cause of Death files. These calculations were performed by project Statistical Analyst Fran Dong, after she had constructed supplementary files containing the Mortality files suicide data, county population data for the years 2001-2005, and county RUCC data for counties with codes 7 and 9.

- a. Mortality Cause of Death files county-level data had to be obtained from individual-case records having “suicide” coded as the “manner of death”. All such cases for 5 states (noted above) were coded for county of residence and then aggregated into county-level figures for computational purposes.
- b. Population estimates data for all counties in the 5 states were obtained from the U.S. Census website www.census.gov/popest/counties/CO-est2006-01.html for the five states.
- c. The census-based FIPS codes for states and counties were also available from the Mortality Cause of Death files; these were used for associating a county’s RUCC code with that county’s number of yearly suicides and its annual population estimates via matchups using such state-and-county FIPS codes.
- d. The RUCC codes for counties in the 5 states were obtained from the website www.ers.usda.gov/Data/RuralUrbanContinuumCodes.

The overall county-level suicide rates for the 5-year period were then calculated. First, the crude suicide rate for each county in each of the five years was determined by dividing the number of suicides in each year by that same year's estimated population; then the five yearly rate figures were summed and this 5-year total divided by 5. These crude suicide rate figures for the highest- and lowest-rate counties in each state are shown in Table 1 below for those counties with a RUCC code of 7 or 9. The rates are interpreted as the 5-year average of the number of suicides in each county per 100,000 population. Also shown for comparison purposes are the state-wide rates for the five selected states.

Table 1

Calculated Suicide Risk Data for Rural and Frontier Counties of Five States

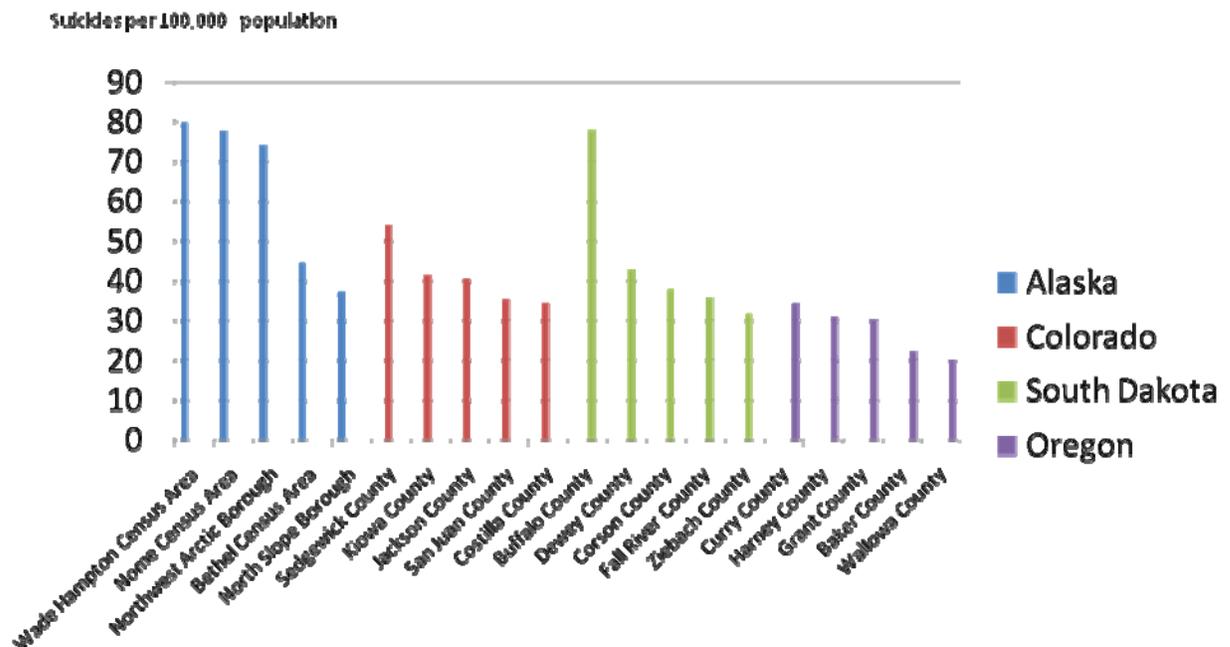
State	Alaska	Colorado	Oregon	South Dakota	Massachusetts
Number of Frontier-type Rural Counties (RUCC9)	10	17	5	35	0
Number of Other Rural Counties with under 20,000 Urban Residents (RUCC 7)	10	17	5	12	2
State-wide Crude Suicide Rate (Cases per 100,000)	23.6	17.3	15.5	14.5	6.6
Five-year Crude Suicide Rate for State's Highest-Risk County (Cases per 100,000)	78.8	53.6	34.2	77.7	11.6
Average Number of Suicides per Year in Highest-Risk County	5.8	1.4	7.4	1.6	1.8
Five-year Crude Suicide Rate for State's Lowest-Risk County (Cases per 100,000)	0.0	8.7	0.0	0.0	3.9
Average Number of Suicides per Year in Lowest-Risk County	0	2.2	0	0	0.4

Next, an alternative calculation was done, this time summing each county’s five-year suicide death total, and dividing that total by its total population over the five-year period. There were no differences at all in the suicide rates between the two calculation methods for 53 of the 113 counties. Another 27 counties had differences in rates between these two calculation methods of just .1 suicides per 100,000 persons. The calculation differences for the remaining 33 counties ranged from .2 to 1.7 suicides, and averaged .5 suicides per 100,000 persons. The single largest difference (1.7) was for a frontier Colorado county averaging only about 1,400 residents over the five year period.

There were at least five high-risk counties in each of the states except Massachusetts, which had only two counties with RUCC codes of 7 or 9, indicating that these were the only counties we could characterize as “rural or frontier” areas. In addition, it is clear that MA’s rural-county risk rates were substantially lower than in any of the other four states, with its highest risk rate at 11.7 suicides per 100,000 population versus a minimum of 20.1 per 100,000 for the lowest suicide rate among the top 20 rural counties from the other four states

Finally, the counties from each state were ranked in order of magnitude of average suicide rates for the period 2001-2005, and the five highest-suicide county rates from each of the four primary toolkit-implementation targeted states are plotted in bar-graph format below.

Highest Average Rural County Suicide Rates in Four States: 2001-2005



Using this Methodology for Targeting Future Collaboration with Rural Primary Care Practices

With the highest-suicide risk rural counties now identified in four states, the research team can utilize these results to inform a future targeted effort to implement the suicide prevention toolkit (discussed in the following section of this report) in rural primary care practices where the need is the greatest. Due to the budgetary and time constraints of this project, the research team chose was unable to pilot the toolkit in the counties identified by this project. However, should funding and staffing become available in the future, the work detailed above will prove extremely helpful in selecting promising implementation sites. Furthermore, should the CDC manage to update its Mortality Cause of Death files with suicide data later than 2005, the procedures outlined above would make updating the rural and frontier county risk levels a straightforward task for any interested and willing States.

Finally, we remain interested in exploring specific risk factors such as advanced age, recent stressful occurrences, and existing disabilities (especially psychiatric depression and substance abuse) known to characterize suicide risk, using whatever county-level information we can obtain from such sources as the Census data, the National Violent Death Reporting System (currently available for 18 states), and other health and mental health data sets containing county-level data, or even individual-case data that has the potential for aggregation into county-level variables. And while such additional risk-factor data would not override the risk levels determined using NCHS actual-suicide statistics as developed here, rural county primary-care doctors and other staff could find them helpful in identifying high-risk patients who come in for care, thus improving their ability to prevent suicides among their higher-risk caseloads. In addition, this information may be useful for State-level administrators, suicide prevention coalitions, and health/mental health providers to ensure targeted strategic planning efforts in high risk rural areas.

References

Ciarlo J.A., Shern D.L., Tweed D.L., Kirkpatrick L.A. & Sachs-Ericsson N. II. The Colorado Social Health Survey of Mental Health Service Needs: Sampling, Instrumentation, and Major Findings. Evaluation and Program Planning, Vol. 15, pp. 133-147, 1992.

Tweed D.L. & Ciarlo J.A. IV. Social-Indicator Models for Indirectly Assessing Mental Health Service Needs: Epidemiologic and Statistical Properties. Evaluation and Program Planning, Vol. 15, pp. 165-179, 1992.

Ciarlo J.A. & Demmler J. Technical Report: Estimating General-Population Risk of Suicide in Colorado Sub-Areas. Univ. of Denver, Dept. of Psychology, 2006.

Phase Two

Project Phase Two: Suicide Prevention Toolkit and Webcast for Rural Primary Care Providers

Project Background

The initial proposed product for the second phase of this project was a suicide prevention video training module for rural primary care providers. However, when the research team began discussions with experts and key informants in rural primary care and suicide prevention prior to content development, it became clear that a revised direction was warranted.

In addition, several experts in rural primary care and physician training were consulted, including, Dr. Jack Westfall, Director of the Colorado Area Health Education Center (AHEC) System and Associate Dean for Rural Health, and Dr. Deb Seymour, Director of Behavioral Sciences and Assistant Residency Director at the University of Colorado at Denver Health Sciences Center. The research team also consulted with suicide prevention experts, Dr. David Litts, Director for Science and Policy at the Suicide Prevention Resource Center (SPRC), and Dr. Peggy West, Senior Advisor with SPRC. SPRC was aware of the dearth of information and tools specifically developed for rural primary care providers and offered to collaborate with the WICHE research team informally on the project. The WICHE/SPRC partnership is described in a subsequent section.

We asked the experts to describe the state of suicide prevention in rural primary care and to suggest what was needed to improve suicide prevention efforts. They suggested that it would be difficult to be successful in preventing suicide in primary care without assistance in recognizing and caring for suicidal patients from community members, staff in the primary care office, and patients' families. They emphasized the need for routine and proactive follow-up and emphasized the need for assistance and tools in addition to suicide prevention education. They acknowledged that physicians need to learn more about suicide prevention, but they also highlighted significant systemic barriers, such as lack of adequate time to care for suicidal patients in a busy clinic schedule, that routinely hamper suicide prevention in rural primary care.

In addition to the experts noted above, we interviewed physicians practicing in five different rural counties in Colorado. The rural physicians agreed with the information provided by the experts in the section above. They emphasized that systemic barriers were having a significant negative impact on their suicide prevention efforts.

During the interviews, rural physicians were asked the following questions:

- 1) What do you do when a patient who appears to be suicidal presents to you?
- 2) Are you satisfied with your level of knowledge about risk assessment and interventions for suicidal patients? Do you feel confident in your ability to address the needs of suicidal patients?
- 3) In your experience, what are the barriers to suicide prevention in your county?

- 4) Do you think additional training in suicide risk assessment and interventions would benefit you and your practice?
- 5) What do you need most in order to improve suicide prevention efforts in your practice?
- 6) Do you think that the components of our toolkit would be useful to you in addressing the needs of suicidal patients?

Interviewees consistently stated that they felt that they and most of their colleagues were fairly well informed about how to intervene with suicidal patients. The most commonly cited systemic barriers were 1) mental health stigma about depression (leading to non-compliance with recommended treatments such as anti-depressants), and 2) a lack of adequate resources such as patients being rejected from overcrowded emergency rooms when put on a mental health hold or a lack of adequate mental health services in their county.

In response to these interviews and the expert consultation, we chose to place equal emphasis on the educational content and the development of suicide prevention tools intended to address systemic barriers. In addition to education, the research team wanted to offer providers tools that they could use to enhance their efforts, given the limitations they encounter.

The final products for this project phase include The Suicide Prevention Toolkit for Rural Primary Care Providers (available in hard copy and electronic form) and a webinar that focused on best practices in suicide prevention and a description of the toolkit. The toolkit and webcast were designed to address some of the systemic problems encountered in rural primary care and to increase the confidence, ease, and skill with which primary care practices care for suicidal patients. The shift from the original project plan to the toolkit and webcast was intended to better meet the needs of rural primary care providers as identified in preliminary research for this project.

The WICHE Partnership with the Suicide Prevention Resource Center

WICHE was approached by SPRC (Dr. David Litts, Director for Science and Policy, SPRC, and Dr. Peggy West, Senior Advisor, SPRC) regarding collaboration on this project because they felt that primary care physicians have a unique opportunity to contribute to suicide prevention efforts. In addition, they indicated that there was no other product in the field that targeted rural primary care providers, thus confirming the need for the toolkit. SPRC expressed interest in playing a supportive consultation role in the toolkit and webcast development. SPRC reviewed the webcast and toolkit contents and provided feedback based on the most recent research and information on suicide prevention education practices. SPRC also added a number of tools for providers which have been incorporated into the toolkit. Their expertise on suicide prevention research, practice and policy complemented WICHE's expertise in rural mental health and primary care. The SPRC consultants have been active and engaged partners throughout the project and plan to work with WICHE to further develop and disseminate the toolkit.

The Original Toolkit – Overall Layout and Components

The toolkit was developed with the goals of increasing provider confidence and competence in identifying, treating, and referring suicidal patients in primary care settings. It is intended to guide providers through the development of a formal and office-specific protocol detailing explicit action steps for identifying and managing suicidal patients. It also serves as a guide for implementing suicide prevention and enhancing collaboration between primary care and behavioral health providers.

The first version of the Suicide Prevention Toolkit for Rural Primary Care Providers contained six components which are listed and described briefly below. A description of component development is provided following the list. This original version of the toolkit was reviewed by providers and community members. After receiving their feedback, a number of additions and revisions were completed in order to enhance the product. The second version of the toolkit is described in the section that follows toolkit feedback. The components for both versions were created by Dr. Mimi McFaul, Dr. Tamie Dehay, and Dr. Christa Smith, with scientific expertise provided by project consultants, Dr. Jim Ciarlo and Dr. Jean Demmler. In addition, the toolkit concept and components were developed and reviewed by Dr. David Litts and Dr. Peggy West with SPRC.

- 1) **Suicide prevention primer for providers:** An educational overview of best practices in suicide prevention.
- 2) **Suicidal patient treatment tracking log and user’s guide:** A comprehensive, time saving tool for tracking the status of suicidal patients.
- 3) **Community education materials:** Suicide prevention posters and wallet cards (with suicide warning signs and the National Suicide Prevention Lifeline phone number). The materials also include a list of publications, websites, and additional resources that can be used to further educate providers, patients, and families about suicide prevention in different populations.
- 4) **Suicide risk assessment pocket cards:** Two different types of pocket-sized card that includes strategies for assessing suicide potential and a decision tree for intervention.
- 5) **Tool for creating an office protocol regarding suicidal patients:** A template for creating an office protocol to coordinate and simplify intervention.
- 6) **Crisis response planning tools for at risk patients:** Patient-centered forms for identifying patient support networks and outlining methods for planning for safety.

The primer is the backbone of the toolkit and was developed and refined simultaneously with the treatment tracking log and community education resources. The primer is based on current research and was reviewed by SPRC several times and amended according to their feedback. It offers providers strategies for more effective suicide prevention given

the challenges they face and contains the following modules: 1) Prevalence and co-morbidity of suicide, 2) Epidemiology, 3) Suicide Risk Assessment, 4) Intervention, and 5) Effective Prevention strategies. Throughout the primer there are explanations for how to use the tools included in the toolkit. For example, the Intervention section features and discusses the Suicide Risk Assessment Pocket Card. The primer was used as the basis of the webcast educational content.

The treatment tracking log was designed as a comprehensive prompt for providers intended to remind them of the questions they should be asking themselves and patients each time they see a suicidal patient. These questions are to be asked and answers should be recorded until the suicidality has resolved. For example, the tracking log prompts providers to ask not just whether medications (e.g., anti-depressants) are being taken, but also whether side effects are being experienced by the patient. This is a key element of treatment as it is common for patients to have medication side effects or other issues that prompt them to stop taking important medications. Addressing side effects and other issues can improve outcomes.

The community education materials were collected for the toolkit from numerous sources including the National Suicide Prevention Lifeline and the Western Colorado Suicide Prevention Foundation. The collection is designed to assist providers with educating the public and patients on how to recognize warning signs of suicide as well as how to help suicidal individuals. They contain messages that attempt to reduce stigma related to depression and suicidality and are aimed at a variety of populations at risk for suicide.

The toolkit contains two versions of suicide risk assessment pocket cards. These cards were designed to be used by providers. The SAFE-T pocket card was developed by Screening For Mental Health, Inc. and SPRC and was designed for mental health professionals. It is a two-sided card that contains instructions on how to evaluate how at-risk a patient is for suicide. The second card is the Suicide Risk Assessment Pocket Card developed by WICHE with consultation from SPRC. The intent of the Pocket Card is very similar to that of the SAFE-T card, but the Pocket Card was designed specifically for medical providers in the primary care setting. The Suicide Risk Assessment Pocket Card also contains examples of how to ask questions about suicidality and algorithms for high, medium, and low risk patients that suggest appropriate treatments and interventions for each risk level. The Pocket Card contains simple language and avoids using mental health lingo contained in the SAFE-T card.

An office protocol tool was developed based on the WICHE teams' clinical experience working with suicidal patients in primary care settings. The protocol directs providers to answer questions regarding how suicidal patients will be handled. For example, providers need to be clear on where patients will be sent if they need to be hospitalized and how soon and how often they will follow-up with patients after release from the hospital. The protocol contains a list of statements with blank space for clinic specific information. For example, the first sentence of the protocol reads, "_____ should be called/paged to assist with evaluation of risk."

The crisis response planning tools were provided by SPRC. The first form instructs providers on how to help patients think through what they will do to be safe if they are feeling suicidal and who they can go to for support and assistance. The second form can be filled out by a primary support person in the patient's life (e.g., a mother or close friend) and the patient with the help of a primary care provider. The purpose of the second form is to help the support person clarify in advance how they will help the patient cope with suicidality and stay safe. These tools are patient-centered and therefore they focus on what will be most effective for each individual patient.

The resource list was developed by SPRC and contains numerous publications, websites, and additional resources for providers, patients, and community members. For example, the list contains a link to guides for families and providers on how to help patients after a suicide attempt.

Feedback from Rural Primary Care Providers and Community Members

After developing a first draft of the toolkit based on expert opinion and provider interviews, WICHE asked a network of rural Colorado providers and community members to review the toolkit and provide feedback. As an incentive a gift certificate of \$50 was offered in return for their completion of a web-based survey. The toolkit was disseminated by Dr. Jack Westfall and the University of Colorado Health Sciences Center, from whom we also received expert consultation at the start of the project. Dr. Westfall sent the toolkit in both the hard copy and electronic form along with a request for participation to a rural provider research network with whom he works. It was hoped that the response rate for feedback would be improved if providers received the mailing from someone whom they recognized. Dr. Westfall also sent the toolkit to a committee of rural community members involved in reviewing health care practices in their communities. WICHE constructed separate online surveys for providers and community members using Survey Monkey and asked participants to fill out the survey at their convenience.

The provider survey, which can be found in Appendix A, was meant to help determine whether the toolkit is a product that primary care providers would find useful and practical. It included both quantitative and qualitative questions related to each of the six toolkit components as well as the toolkit overall. The survey asked questions meant to determine what parts of the toolkit providers would be likely to use in their practice and share with colleagues and what components providers did not find useful. For those pieces of the toolkit that providers said they would not use, follow-up questions clarified why they would not be used. Finally, providers were asked what could be done to improve the toolkit.

The survey also looked at the subjective impact of the toolkit on provider confidence, knowledge, and effectiveness in working with suicidal patients. It also asked two questions intended to determine whether providers felt that suicide was a problem in their community.

A shorter version of the survey was also given to rural community members. This survey focused on the perceived value of the toolkit for the community itself. The questions

were essentially equivalent to those found in the provider survey, though they were tailored toward community members and the impact they felt the toolkit would have on their community. Community member responses were reviewed, but will be covered in less detail because WICHE's priority was to create a toolkit that is appealing and useful to providers. Below is a description of types of providers who responded to the survey as well as the numbers of both providers and community members who filled out the surveys. Survey feedback regarding each specific part of the toolkit, feedback on the toolkit as a whole, and suggestions for future directions of the toolkit are discussed as well.

WICHE received feedback from 27 people, 17 of whom were providers and 10 of whom were community members. Providers included physicians, physicians assistants, registered nurses, and nurse practitioners. Community members included individuals from a variety of backgrounds including farming, social service, and business.

Primary Care Provider Feedback

Overall, provider response to the toolkit was positive. Providers felt that the toolkit would be useful and effective in improving suicide prevention efforts. Over 80% of providers indicated that the toolkit increased their confidence and knowledge regarding their work with suicidal patients and that the toolkit was a useful product. Overall, they also indicated that they would use the toolkit if they had the opportunity. However, many providers said that they would select and apply components of the toolkit, rather than the whole toolkit, because they already had a version of the some components in place in their practice.

Feedback from several providers suggested that more community involvement in suicide prevention was needed, which echoed feedback WICHE received during the physician interviews. Providers highlighted the need for more public education to make the community aware of warning signs and effective methods of responding to high-risk individuals. They also said that mental health services and primary care services needed better collaborative working relationships and agreement on crisis intervention protocol and suicide prevention strategies.

The following is a quote from one provider's survey regarding the need for community education:

The other patient who committed suicide was a 14 yr. old who was very angry about his family situation and very impulsively hung himself. He had been telling his friends at school he was going to kill himself. I don't think his parents took it seriously. I think that some challenges are to get programs into the middle and high school teachers and counselors. Also, community education would reach more of the public if it was in the bulletin boards of community buildings, i.e. post office, church, court house, schools.

As another provider phrased it, increased community education and involvement is needed as an adjunct to the toolkit because some suicidal individuals do not have a medical problem and therefore do not see a primary care provider.

The risk assessment cards and crisis response planning tools were rated as the most useful parts of the toolkit by almost 90% of providers. However, the primer and office protocol were rated as valuable tools by nearly 70% of providers. Respondents overwhelmingly preferred the Pocket Guide for Primary Care Professionals to the SAFE-T Pocket Card. The most common reason cited for not finding a toolkit component useful was that the provider already has a version of the tool in use. Two of the respondents felt that the primer was too long. Several providers did not like the posters because they felt that they were unclear or depicted manual labor as negative. However, more than the majority of providers felt that the posters could help combat mental health stigma and had the potential to help suicidal patients, their families, and their friends. Several providers asked for expanded resources in the community education section of the toolkit (e.g., educational materials for patients and posters that target a wide variety of populations).

A small percentage of respondents offered feedback to an open-ended question regarding their overall impression of the toolkit. Some suggestions were to make the toolkit available to mental health providers as well, and to provide in person lectures regarding the application of the toolkit to primary care providers.

Very few providers offered recommendations for additions to the toolkit. Some of the ideas proposed were, a list of referrals for mental health services, funding to pay for time spent with suicidal patients, pamphlets that help reduce stigma related to mental health problems, and continuing education for providers on prescribing antidepressants.

Community Member Feedback

Overall, community members were positive about the toolkit including robust educational content. Community members endorsed the education of providers and community members as the most important aspect of suicide prevention in their communities and suggested increased efforts in these areas. Like several of the providers, they also wanted the toolkit to include expanded educational materials for patients as well as family and friends of people at risk for suicide. The primer and community education materials were among the toolkit components rated most important by community members.

The following is quote from a rural community member that highlights community member sentiment regarding the need for better suicide prevention education efforts:

All of this only works if you can get people to read material and question what they are feeling. Because this is one of them issues that is dealt with behind doors and usually doesn't leave the family (I believe). So you may reach people with problems through family or other people, not the sufferer.

The Revised and Current Toolkit

Based on feedback from providers in the field and suicide prevention experts, a second version of the toolkit was created. The toolkit was organized into four sections including: core start-up components, mental health partnership, patient management, and patient education. Each section includes all of the tools from the original version, many of which have undergone significant additions and revisions. The Catalog of Posters and Brochures, for example, has been expanded to include youth and Native American suicide prevention posters and more information on how to obtain posters that address a wider range of populations. All of the tools described were developed by both WICHE and SPRC unless otherwise noted. Additions to each of the toolkit sections will be described briefly below. If an addition is not noted, please see the section titled “The Original Toolkit” for a description of the component.

<p>Core Start-Up Components</p> <ul style="list-style-type: none">Introductory LetterQuick Set UpPrimerOffice ProtocolResource List	<p>Patient Management</p> <ul style="list-style-type: none">Primary Care Pocket CardsSafety Planning ToolsCrisis Support Planning ToolsTracking LogPrimary Care Practice ModelSafety Planning Card
<p>Mental Health Partnership</p> <ul style="list-style-type: none">Outreach LetterSAFE-T Card	<p>Patient Education</p> <ul style="list-style-type: none">Warning Signs CardsFirearm Storage BrochureCatalog of Posters/Brochures

Core Start-Up Additions

The Introductory Letter is a one-page letter that urges providers to examine the quick set up guide (described below) and begin to implement the toolkit in their practice.

Quick Start Guide outlines a six-step process of implementing the toolkit in a primary care practice. The guide suggests that users begin by communicating with all staff about the new suicide prevention initiative in their office and selecting a lead suicide prevention co-coordinator who will become familiar with the toolkit contents.

Mental Health Partnership Additions

The Mental Health Partnership Letter contains one page of text and one page of suicide prevention training resources. The letter is meant to be delivered to any mental health provider that serves the community where the primary care practice is located. The primary goal of the letter is to invite mental health providers to work collaboratively with

the primary care practice to develop a model for collaborative care for suicidal patients. It highlights the fact that the primary care practice is implementing the toolkit and offers mental health providers the SAFE-T pocket card and suicide prevention training resources as a means of enhancing suicide prevention efforts in their practice.

Patient Management Additions

The Primary Care Practice Model provides a visual representation of the suicide prevention approach promoted by this toolkit. It is divided into three phases with details on steps to be taken at each phase: preparation, prevention, and intervention.

The Safety Planning Card was designed to help providers assist patients at high risk for suicide to develop a personalized list of coping strategies and sources of support. The card outlines a six-step process which includes, discussion of warning signs, internal coping strategies, social contacts, family members, professional agencies to be contacted, and making the patient's environment safe.

Patient Education Additions

The Warning Signs Card was developed by the National Suicide Prevention Lifeline. It contains warning signs for suicide and the lifeline's phone number. It can be used by patients, families, and community members who want to know more about when and how they should act to prevent a suicide.

Because lethal means restriction is an important strategy in suicide prevention, the Firearm Storage Brochure was included in the toolkit. It was created as part of the Washington State "Lok-It-Up" campaign and can be used to educate patients about reasons for locking firearms and types of locking devices.

Suicide Prevention Webcast

The webcast was developed as a means of educating providers about suicide prevention as well as introducing them to the toolkit. It was anticipated that webcast and toolkit would encourage providers to take some additional steps to address the problem of suicide. The webcast also served to advertise the toolkit, and to determine participant interest in the toolkit prior to official launch date.

In addition to the national audience of 82 viewers that watched it online, the webcast was also viewed by a live audience of medical students (in the School of Medicine's Multidisciplinary Rural Track), and students of nursing, pharmacy, and public health from the University of Colorado at Denver Health Sciences Center. The webcast was conducted by Dr. Mimi McFaul, Dr. Tamie Dehay, and Dr. Brian Stafford and was comprised of three parts:

- 1) Best Practices in Suicide Risk Identification
- 2) Best Practices in Suicide Prevention
- 3) Prescribing for Depressed Patients

4) National Launch of the Suicide Prevention Toolkit for Rural Primary Care Providers, including a review of the survey feedback received from rural providers and community members.

The purpose of including the section on prescribing for depression in the webcast was that many physicians we interviewed or received survey feedback from stated that they needed more education in this area. It was hoped that the discussion would provide needed education and increase attendance by physicians. A physician-facilitated discussion, conducted by Dr. Mark Deutchman, followed the webcast and addressed the challenges of suicide prevention. The webcast is now available for asynchronous viewing on the WICHE website.

Launching of the Toolkit

The toolkit was launched on the SPRC website in late June, 2009. Both electronic and hard copies are available. The electronic version will be offered at no cost at <http://www.sprc.org/pctoolkit/index.asp>. The hard copy binder version will be offered for \$25 per toolkit to cover printing and staff time costs and is available through WICHE.

Separate from the actual toolkit, a marketing and informational card was developed to provide an introduction to the purpose and components of the toolkit. It contains facts about suicide, a brief overview toolkit components, and information on obtaining a copy of the toolkit.

Discussion and Policy Implications

During the past decade there has been an increase in public policy activity related to suicide prevention. In 1997, Congress passed one resolutions recognizing suicide as a national problem and another sighting suicide prevention as a national priority. Since 1997, two major laws have been created: The Garrett Lee Smith Memorial Act (PL 108-355) and the Joshua Omvig Veterans Suicide Prevention Act (PL 110-110). The National Suicide Prevention Resource Center, the National Suicide Prevention Hotline, and a National Strategy for Suicide Prevention have been developed since then as well. Several states have passed suicide prevention legislation recognizing suicide as a serious problem and have authorized the development of state suicide prevention plans.^h

More work needs to be done to strengthen suicide prevention efforts in rural primary care and increase the number of in mental health professionals available to provide crisis intervention as well as mental health treatment. Finally, the rural communities in which providers work must be engaged in suicide prevention activities. This comprehensive approach would create a team effort in which providers, families, and communities partner to reduce suicide. In the integrated care movement, this type of approach is referred to as “no wrong door.” No matter where a suicidal individual presents (to a provider, a family member, at a school or church) there should be no place where they cannot get help or be directed to a place where they can get help. Though it is essential to prevent suicide in primary care, it would be a mistake to expect providers to succeed in preventing suicide alone. Primary care provider reimbursement for interventions should have an increased focus on suicidal patients, provider education, increasing availability of mental health services, and additional suicide prevention research.

Primary care

With the exception of prescribing medications, primary care providers are not reimbursed for addressing the mental health needs of their patients. For example, they cannot bill for talking to patients about their suicidality, assessing for suicide risk, and other important interventions. They cannot bill for talking to patients about depression, one of the major risk factors for suicide. Providing reimbursement may improve availability of these services in rural communities.

Equally important to rural communities is the focus on education and continuing education in suicide prevention. In fact, physician education is among the most effective strategies for suicide prevention.ⁱ In order to be effective in their interventions, providers need to be informed and kept up to date about the best practices in suicide prevention. This includes information such as that found in the toolkit as well as the most current information about prescribing medication for depression. To this end, inexpensive or free webinars could be offered to rural providers for continuing education credits on a regular basis.

Mental health

Rural areas in the United States have consistently found it challenging to recruit and retain mental health providers. As a result, primary care providers often have very few or no mental health providers to whom they can refer patients at risk for suicide.

Alternatively, providers may find that referral sources are overwhelmed and patients may face long waits for care that is needed immediately. Telehealth offers a promising option for increasing mental health services in rural areas. Mental health providers can live in urban areas and provide telehealth care to people in underserved communities.

Psychiatrists can also provide consultation on prescribing antidepressants and other medications to providers.

Research

Much research is still needed in the area of suicide prevention in primary care. It is still unclear exactly how to optimally engage communities and primary care providers in suicide prevention. Future research must expand what we currently know about effective strategies and whether current practices, such as gatekeeper training, could be effective in reducing suicide or whether entirely new methods should be created. One of the most effective suicide reduction strategies is physician education regarding treatment and intervention with depression and restricting lethal means (e.g., guns or poisons).^j

However, more research is needed on exactly how providers should be educated. For example, how should this education be delivered? The toolkit could be useful in this effort. A formal evaluation of how the toolkit created by this project is currently being utilized following the national launch and how it impacts the identification and referral patterns of suicidal patients is an area of future research that is recommended.

In the interviews that WICHE conducted, providers stressed that they needed the assistance of primary care staff (such as front office staff and nurses), patients, families, and their communities in suicide prevention. In short, they said that they couldn't prevent suicide alone. However, little is known about how to effectively educate and mobilize rural communities for suicide prevention.

Several programs, such as gatekeeper training, have been developed but require more study. One problem has been that studies have looked at the number of deaths as the indicator of the effectiveness of suicide prevention programs. However, number of deaths can be an insensitive indicator of effectiveness because the number of deaths by suicide is often too small to provide statistical results sensitive to the intervention. More robust and sensitive measures need to be developed in order to successfully study these interventions. For example, the number of attempts in any given county could be recorded by looking at emergency room admissions data. These numbers could be examined along with number of deaths by suicides per year. Future research is needed in this area.

Future Toolkit Research and Dissemination

In partnership with SPRC, WICHE plans to continue to elicit formal feedback in order to further improve the toolkit. To this end, WICHE plans to partner with additional physician networks. Informal feedback is being collected as well, for example, from the

audience at the American Academy of Suicidology conference in April, 2009. Mimi McFaul conducted an additional webcast on the toolkit in June, 2009, for the Federal Interagency Rural Behavioral Health Workgroup for an audience of SAMHSA rural grantees. Additional informal feedback will be gathered at the Collaborative Family Healthcare Association (CFHA) conference in October, 2009. The poster presentation at this conference will also serve as a means of increasing awareness about the toolkit project among both primary care and mental health providers.

Ideally, the toolkit would be piloted in a number of rural counties using a variety of carefully chosen measures. Dissemination of the toolkit during the pilot would be accompanied by a formal training seminar that would instruct providers in best practices in suicide prevention as well as how to use the toolkit and its resources. WICHE and SPRC are currently determining how to best disseminate the toolkit among physicians, for example, by distributing the toolkit through the State Offices of Rural Health, the State Primary Care Associations, or the American Academy of Family Physicians.

^a Singh GK, Siahpush M. The increasing rural urban gradient in US suicide mortality, 1970,-1997. *Am J Public Health.* 2003;93(5):1161-1167.

^b Luoma JB, Martin CE, Pearson JL. Contact with mental health and primary care providers before suicide: a review of the evidence. *Am J Psychiatry.* 2002;159:909-916; Andersen UA, Andersen M, Rosholm JU, Gram LF. Contacts to the health care system prior to suicide: a comprehensive analysis using registers for general and psychiatric hospital admissions, contacts to general practitioners and practicing specialists and drug prescriptions. *Acta Psychiatr Scand.* 2000;102: 126-134.

^c Luoma JB, Martin CE, Pearson JL. Contact with mental health and primary care providers before suicide: a review of the evidence. *Am J Psychiatry.* 2002;159:909-916.

^d CDC-Web-Based Inquiry Statistic Query and Reporting System. Atlanta, GA. <http://www.cdc.gov/ncipc/wisqars/>. Accessed May 15, 2009.

^e Singh GK, Siahpush M. The increasing rural urban gradient in US suicide mortality, 1970,-1997. *Am J Public Health.* 2003;93(5):1161-1167.

^f Luoma JB, Martin CE, Pearson JL. Contact with mental health and primary care providers before suicide: a review of the evidence. *Am J Psychiatry.* 2002;159:909-916; Andersen UA, Andersen M, Rosholm JU, Gram LF. Contacts to the health care system prior to suicide: a comprehensive analysis using registers for general and psychiatric hospital admissions, contacts to general practitioners and practicing specialists and drug prescriptions. *Acta Psychiatr Scand.* 2000;102: 126-134.

^g Luoma JB, Martin CE, Pearson JL. Contact with mental health and primary care providers before suicide: a review of the evidence. *Am J Psychiatry.* 2002;159:909-916

^h Suicide Prevention Action Network USA. Washington, DC.

http://www.spanusa.org/index.cfm?fuseaction=home.viewPage&page_id=98BC0A60-C877-A60B-362BE0F40D8D1B09. Accessed May 29, 2009.

ⁱ Mann JJ, Apter A, Bertolote J et al. Suicide Prevention Strategies: A Systematic Review. *JAMA.* 2005;294(16):2064-2074.

^j Mann JJ, Apter A, Bertolote J et al. Suicide Prevention Strategies: A Systematic Review. *JAMA.* 2005;294(16):2064-2074.

Appendix A

Suicide Prevention Toolkit for Rural Primary Care Providers: Provider Survey

Contact Information

Your feedback is vital to the improvement of the suicide prevention toolkit. Thank you for your feedback! There are seven sections total in this survey.

1. Please provide your name and mailing address in the box below. The purpose of providing this information is so that we can send you your gift card. PLEASE NOTE THAT WE WILL NOT BE ABLE TO PROVIDE YOU WITH A GIFT CARD WITHOUT THIS INFORMATION.

2. Please circle the incentive you would like to receive.

- 1) \$50 dollar gift certificate to iTunes
- 2) \$50 dollar gift certificate to Cabela's
- 3) \$50 dollar gift certificate to REI

Section 1: Primer

1. Please indicate how well you agree with the following statements by circling one of the choices below each statement.

- Suicide is a serious problem in my community.
Strongly Disagree
Disagree
Neutral
Agree
Strongly Agree
- Better suicide prevention efforts are needed in my community.
Strongly Disagree
Disagree
Neutral
Agree
Strongly Agree
- The primer is well organized and clear.
Strongly Disagree
Disagree
Neutral
Agree
Strongly Agree
- Reviewing the primer added to my suicide prevention knowledge base.

Strongly Disagree
Disagree
Neutral
Agree
Strongly Agree

- I plan to apply what I have learned from the primer to my practice.

Strongly Disagree
Disagree
Neutral
Agree
Strongly Agree

- Reviewing the primer has increased my confidence in working with suicidal patients.

Strongly Disagree
Disagree
Neutral
Agree
Strongly Agree

2. Would you like to offer any additional feedback about the primer?

Section 2: Treatment-Tracking Log

1. Please indicate how well you agree with the following statements by circling one of the choices below each statement.

- The treatment-tracking log is well organized and clear.

Strongly Disagree
Disagree
Neutral
Agree
Strongly Agree

- Reviewing the treatment-tracking log added to my suicide prevention knowledge base.

Strongly Disagree
Disagree
Neutral
Agree
Strongly Agree

- I plan to apply what I have learned from the treatment-tracking log to my practice.

Strongly Disagree
Disagree
Neutral
Agree
Strongly Agree

- Reviewing the treatment-tracking log has increased my confidence in working with suicidal patients.

Strongly Disagree
Disagree

Neutral
Agree
Strongly Agree

- Tracking the information contained in the log has the potential to improve outcomes with suicidal patients.

Strongly Disagree
Disagree
Neutral
Agree
Strongly Agree

- The treatment tracking log users guide provides a good explanation of how to use it.

Strongly Disagree
Disagree
Neutral
Agree
Strongly Agree

- We currently document most of the information required by the log in patient medical records.

Strongly Disagree
Disagree
Neutral
Agree
Strongly Agree

3. Would you like to offer any additional feedback about the treatment-tracking log?

Section 3: Risk Assessment Pocket Cards

1. Please circle the risk assessment pocket card would you prefer to use.

- 1) SAFE-T Pocket Card
- 2) Pocket Guide for Primary Care Professionals

2. Please indicate how well you agree with the following statements (please answer the following questions with regard to the card that you prefer).

- The risk assessment card is well organized and clear.

Strongly Disagree
Disagree
Neutral
Agree
Strongly Agree

- Reviewing the card added to my suicide prevention knowledge base.

Strongly Disagree
Disagree
Neutral
Agree
Strongly Agree

- I plan to apply what I have learned from the card to my practice.
 - Strongly Disagree
 - Disagree
 - Neutral
 - Agree
 - Strongly Agree

- Reviewing the card has increased my confidence in working with suicidal patients.
 - Strongly Disagree
 - Disagree
 - Neutral
 - Agree
 - Strongly Agree

- Using the card has the potential to improve outcomes with suicidal patients.
 - Strongly Disagree
 - Disagree
 - Neutral
 - Agree
 - Strongly Agree

- Using the card would improve my accuracy in assessing suicidal patients.
 - Strongly Disagree
 - Disagree
 - Neutral
 - Agree
 - Strongly Agree

3. Would you like to offer any additional feedback about the risk assessment pocket cards? If so, please clarify which card you are referring to.

Section 4: Crisis Response Planning Tools for Patients:

1. Please indicate how well you agree with the following statements.

- The planning tools are well organized and clear.
 - Strongly Disagree
 - Disagree
 - Neutral
 - Agree
 - Strongly Agree

- Reviewing the planning tools added to my suicide prevention knowledge base.
 - Strongly Disagree
 - Disagree
 - Neutral
 - Agree
 - Strongly Agree

- I plan to apply what I have learned from the planning tools to my practice.
 - Strongly Disagree
 - Disagree
 - Neutral

Agree
Strongly Agree

- Reviewing the planning tools has increased my confidence in working with suicidal patients.

Strongly Disagree
Disagree
Neutral
Agree
Strongly Agree

- Using the planning tools has the potential to improve outcomes with suicidal patients.

Strongly Disagree
Disagree
Neutral
Agree
Strongly Agree

- A brief description of how to use the crisis response planning tools can be found in the primer. However, I would benefit from more instruction on using the crisis response tools with patients.

Strongly Disagree
Disagree
Neutral
Agree
Strongly Agree

- I frequently work with suicidal patients to help them develop a social support system and coping strategies.

Strongly Disagree
Disagree
Neutral
Agree
Strongly Agree

2. Would you like to offer any additional feedback about the planning tools?

Section 5: Office Protocol

1. Please indicate how well you agree with the following statements.

- The protocol is well organized and clear.

Strongly Disagree
Disagree
Neutral
Agree
Strongly Agree

- Implementing the office protocol would increase my confidence in working with suicidal patients.

Strongly Disagree
Disagree
Neutral
Agree
Strongly Agree

- Using the office protocol has the potential to improve outcomes with suicidal patients.

Strongly Disagree
Disagree
Neutral
Agree
Strongly Agree

2. Our office currently implements a clear and specific protocol for working with suicidal patients (please circle your choice).

- 1) Yes
- 2) No

3. Would you like to offer any additional feedback about the office protocol?

Section 6: Community Education Materials

The community education materials are comprised of the resource list and suicide prevention posters.

1. I will likely access some of the resources provided on the resource list (please circle your response).

- 1) Yes
- 2) No

2. Some providers feel that mental health stigma can be a barrier to the treatment of problems (such as depression) that can lead to suicide. Do you think the posters in the toolkit have the potential to help reduce mental health stigma in your town?

- 1) Yes
- 2) No

3. Do you think some of your patients will benefit from viewing the posters?

- 1) Yes
- 2) No

4. Would you like to offer any additional feedback about the resource list or suicide prevention posters?

Section 7: Toolkit Overall

1. Please indicate how well you agree with the following statements.

- The toolkit as a whole is organized and clear.

Strongly Disagree
Disagree
Neutral
Agree
Strongly Agree

- The toolkit added to my suicide prevention knowledge base.

Strongly Disagree

Disagree
Neutral
Agree
Strongly Agree

- Reviewing the toolkit has increased my confidence in working with suicidal patients.

Strongly Disagree
Disagree
Neutral
Agree
Strongly Agree

- I believe that using the information and tools contained in the toolkit has the potential to improve outcomes with suicidal patients.

Strongly Disagree
Disagree
Neutral
Agree
Strongly Agree

- The toolkit as a whole is a useful product.

Strongly Disagree
Disagree
Neutral
Agree
Strongly Agree

2. Which components of the toolkit would you use in your practice if you had the opportunity?

- 1) Primer
- 2) Treatment-tracking log
- 3) Risk assessment pocket card(s)
- 4) Crisis response planning tools
- 5) Office protocol
- 6) Community education materials: resource list and posters

3. For those you would not use, please write down the number of the component from the list above with a brief explanation as to why you would not use it.

4. Which aspects of the toolkit would you share with a colleague if you had the opportunity?

- 1) Primer
- 2) Treatment-tracking log
- 3) Risk assessment pocket card(s)
- 4) Crisis response planning tools
- 5) Office protocol
- 6) Community education materials: resource list and posters

5. What would be the single most valuable tool we could provide in future version of this toolkit to support your work with suicidal patients?

6. Which of the following proposed additions to the toolkit would be most useful to you and your practice (please circle your choice)?

- 1) Community suicide prevention trainings
- 2) Depression treatment web cast with a focus on anti-depressant prescribing
- 3) Web-based suicide prevention staff training module for staff in your practice

7. Would you like to offer any additional feedback about the toolkit as a whole?



The WICHE Center for Rural Mental Health Research was established in 2004 to develop and disseminate scientific knowledge that can be readily applied to improve the use, quality, and outcomes of mental health care provided to rural populations. As a General Rural Health Research Center in the Office of Rural Health Policy, the WICHE center is supported by the Federal Office of Rural Health Policy, Health Resources and Services Administration (HRSA), Public Health Services, grant number U1CRH03713.

The WICHE Center selected mental health as its area of concentration because: (1) although the prevalence and entry into care for mental health problems is generally comparable in rural and urban populations, the care that rural patients receive for mental health problems may be of poorer quality, particularly for residents in outlying rural areas and (2) efforts to ensure that rural patients receive similar quality care to their urban counterparts generally requires restructuring treatment delivery models to address the unique problems rural delivery settings face. Within mental health, the Center proposes to conduct the research development/dissemination efforts needed to ensure rural populations receive high quality depression care.

Within mental health, the Center will concentrate on depression because: (1) depression is one of the most prevalent and impairing mental health conditions in both rural and urban populations, (2) most depressed patients fail to receive high quality care when they enter rural or urban treatment delivery systems, (3) outlying rural patients are more likely to receive poorer quality care than their urban counterparts, (4) urban team settings are adopting new evidence-based care models to assure that depressed patients receive high quality care for the condition that will increase the rural-urban quality chasm even further, and (5) urban care models can and need to be refined for delivery to rural populations.

The WICHE Center is based at the Western Interstate Commission for Higher Education. For more information about the Center and its publications, please contact:

WICHE Center for Rural Mental Health Research

3035 Center Green Drive

Boulder, CO 80301

Phone: (303) 541-0311

Fax: (303) 541-0230

<http://wiche.edu/wicheCenter>

The WICHE Center for Rural Mental Health Research is one of seven Rural Health Research Centers supported by the Federal Office of Rural Health Policy (ORHP), Grant No. 1 U1CRH03713-01. This project is funded by ORHP, Health Resources and Services Administration, U.S. Department of Health and Human Services. The specific content of this paper is the sole responsibility of the authors.