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Veteran Suicide Risk Reduction Through Targeted Dissemination Of An Easy To Use Risk Screening Instrument

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Abstract

On August 3, 2016, the United States Department of Veterans Affairs Office of Suicide Prevention published the most comprehensive analysis of Veteran suicide in the nation's history. The Office of Suicide Prevention examined more than 55 million Veteran healthcare records from 1979 to 2014 from all 50 states and four territories (Office of Suicide Prevention, 2016). The study results found that although Veterans account for only 8.5% of the U.S. adult population, they are responsible for 18.5% of all U.S. suicides (Office of Suicide Prevention, 2016). After adjusting for differences in age and gender, the risk for suicide was 21% higher in the Veteran population than their civilian peers (Office of Suicide Prevention, 2016). Substantial decreases in suicide rates have been achieved within the patient populations of veteran, military, and civilian healthcare organizations following targeted dissemination of an easy to use suicide risk screening instrument. An evidence-based tool currently exists which is effective not only as a predictor of suicide risk but also is preventative when appropriately disseminated. A community health nursing initiative can reduce suicide rates for those Veterans who do not have access to mental health services through dissemination of this tool in a targeted fashion in partnership with a Veterans service organization.

Overview of Veteran suicide

The responsibility of the government to provide healthcare is an ongoing debate in this country. For those individuals enlisted or conscripted into military service legislation makes this government responsibility very clear. The Department of Veterans Affairs (VA) was created August 9, 1921 as a consolidation of numerous veteran-centric governmental entities to provide healthcare services to military personnel returning home following World War I. This "duty" to provide care was established and as a result the VA has grown to become the largest healthcare

organization in the U.S. The VA now provides care to more than nine million veterans and operates 1,250 health care facilities, 172 VA Medical Centers, and 1,069 outpatient sites of varying complexity (About VA, 2017).

With a government mandate to provide healthcare to the Veteran population and numerous facilities and personnel in place, it is surprising then that approximately 40% of Veterans do not receive care from the VA (VA Health Care Utilization, 2016). The reasons for seeking care outside the VA or failing to find care at all vary greatly. Geographical location, lack of social/family support, knowledge barriers, and a disbelief in the ability to improve one's health are all common reasons that Veterans seek care outside the VA or not at all (Office of Research and Development, 2017). As a result, the challenges of this population often fall upon community healthcare providers who are ill-equipped to manage the complexities of these patients.

Troubling findings include continued evidence of elevated suicide rates in middle-aged and older Veterans as compared to the Veteran population as a whole. 65% of all Veterans who died by suicide were age 50 or older (Office of Suicide Prevention, 2016). Should this trend continue, a potential crisis awaits the Veterans of conflicts in Iraq and Afghanistan whose suicide rate surpassed that of their civilian counterparts for the first time in history in 2006 (Office of Suicide Prevention, 2016). The most haunting aspect of this epidemic can be found by merely reviewing the statistics. In the fourteen years from 2003-2017, combat operations in Iraq accounted for 4410 fatalities (U.S. Department of Defense, 2019). In comparison, in the single year of 2014 more than 7300 Veterans took their own life (Office of Suicide Prevention, 2016) making one's status as a Veteran dramatically deadlier than having been in combat in the cities

and towns of Iraq. A community nursing intervention is needed immediately to save the lives of these men and women and change the trajectory of this crisis.

Identifying the Problem

The problem is the disparity between those receiving mental health services from the VA and those that do not or cannot. Approximately 61% of the Operation Iraqi Freedom/Operation Enduring Freedom/Operation New Dawn (OIF/OEF/OND) Veteran population receive healthcare through the VA (VA Health Care Utilization, 2016). The remaining 39% of this population either receive healthcare through community providers unaffiliated with the VA healthcare system or fail to receive healthcare at all. VA data does not quantify the number of Veterans who fail to seek care entirely. The VA Office of Suicide Prevention notes that "increases in suicide rates are particularly evident among female Veterans and Veterans who do not use VHA services" (Office of Suicide Prevention, 2016, p. 45). During the period 2001-2014, Veteran suicides increased by a staggering 32% (Office of Suicide Prevention, 2016). When comparing suicide rates of Veterans who receive care from the VA versus those receiving care from non-VA affiliated providers, the results are far more troubling. Figure 1 details the increase in suicide in all Veterans, Veterans who receive VA Healthcare services, and Veterans receiving care from non-VA affiliated providers or no care at all.

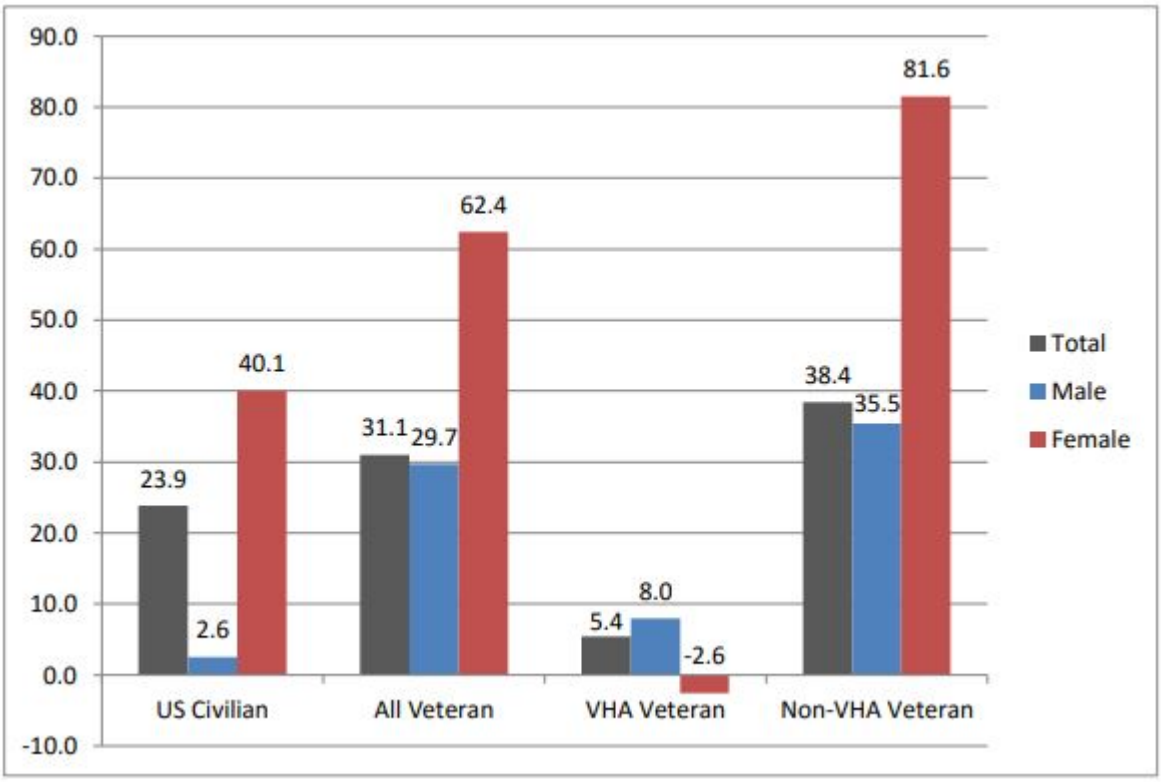

Figure 1. Percent Changes in Suicide Among Veterans and Civilians, 2001–2014, (Office of Suicide Prevention, 2016).

Literature Review

A literature review utilizing PubMed, Scopus, and CINAHL was conducted searching the following terms: veteran, suicide, suicide risk screening, PTSD, former military, suicide prevention, veterans affairs (VA), and depression. Articles older than ten years were not included. Articles addressing only suicide without referencing Veteran or military participants were excluded.

Many studies linked combat exposure to increased suicide rates in the Veteran population. Crum-Cianflone, Powell, LeardMann, Russell & Boyko (2016) found that combat

experience was a prognostic indicator of future risk for mental health disorders including suicide irrespective of service branch. Specifically, this study found that combat experience, as opposed to deployment to a combat zone, was the determining factor in predicting future mental health disorder risk (Crum-Cianflone et al., 2016). This study is of particular interest due to the large sample size (n=31,110) and a large number of respondents (n=17,152) who completed both the baseline (June 2004 – February 2006) and follow up surveys (June 2007 – December 2008).

Maguen, Madden, Cohen, Bertenthal, Neylan & Seal (2015) conducted a population-based retrospective cohort study which reviewed 45,741 OIF/OEF/OND Veterans screened for suicide risk between January 2010 and June 2014. Of those with a positive suicide risk screening, 75.3% reported having suicidal thoughts. Furthermore, 12.5% reported having a plan, 9.5% had previously attempted suicide, and 4.3% reported both suicidal thoughts and a plan for committing suicide (Maguen et al., 2015). Many modifiable risk factors were linked to increased suicide rates including drug, alcohol, and high-risk sexual behavior. Maguen et al., (2016) also found that a delay in time from a positive screening to initiation of care was the single suicide risk factor with the most significant immediate potential for improvement.

A prospective cohort study by Pedersen, Marshall & Kurz (2016) of 812 Veterans between the age of 18 and 34 found that continued follow up is a major obstacle to ensuring proper mental healthcare in this age group. 70% of the Veterans in this cohort had a positive screening for mental health disorders, but only 30-35% of these Veterans received minimally adequate mental healthcare. Of those who agreed to meet with a mental health professional, more than 50% failed to return for a second visit. Though this study was able to show the unique challenges related to this subgroup, it did not definitively determine a method for improving upon these dismal statistics.

Discussion

Gaps in the literature are notable. While Veteran mental health screening is commonplace within the VA healthcare system, it is unclear if it routinely takes place in the clinics of the community healthcare providers. Furthermore, it is unclear that community healthcare providers consistently identify their Veteran patient population. The evidence of increased suicide rates so clearly delineates between a Veteran receiving care from the VA and those that do not that this in itself should be alarming. Veterans, and the organizations that purport to support them, must act.

As of 2014, the United States Preventive Services Taskforce concluded that "the current evidence is insufficient to assess the balance of benefits and harms of screening for suicide risk in adolescents, adults, and older adults in primary care" (Suicide Risk in Adolescents, 2014). Furthermore, a systematic review published in 2017 of suicide risk assessment methods applied to a general population showed that the frequency of "false positives" limits their clinical utility (Nelson et al., 2017). These findings were echoed by another systematic review by Runeson et al., (2017) that found none of the 15 risk assessment instruments evaluated in the general population in that study fulfilled requirements for sufficient diagnostic accuracy. Of note, the Columbia Suicide Severity Rating Scale (C-SSRS) was not included in either systematic review. Evidence supports the effectiveness of the C-SSRS, but only when effectively disseminated to those most likely to encounter a potentially suicidal individual.

While these systemic studies question the utility of suicide screening in the general population, the VA study demonstrates that suicide risk exists in the veteran population and it is appropriate to conduct suicide screening and prevention now. While a thorough search of the literature is critical in the completion of this project, understanding suicide specifically as it applies to Veterans is paramount. This perspective allows one to observe the current trend and with time may allow for critical evaluation of proposed interventions.

An Evidence-Based Risk Screening Tool Exists

A community health intervention is needed immediately to save the lives of these men and women and change the trajectory of this crisis. An evidence-based tool currently exists which is effective not only as a predictor of suicide risk but also is preventative when appropriately disseminated. The C-SSRS is a simple but effective tool consisting of six “yes” or “no” questions that can be used by anyone from the non-medical layperson to the most senior healthcare provider. Questions such as "Have you wished you were dead or wished you could go to sleep and not wake up?" or "Have you had any thoughts about killing yourself?" require no mental health training and leave little ambiguity for the screener. It is free to use by any healthcare organization, academic institution and the general public. An easily implementable version for use within an electronic medical record is also available (Columbia Lighthouse, 2017).

A 2017 journal article in the *Archives of Suicide Research* discussed the (C-SSRS) as a well-regarded screening tool that has been determined to reduce suicide rates (Interian et al., 2017). As part of a comprehensive “zero suicide initiative,” Cornerstone, the largest community-based outpatient mental healthcare provider in the U.S., following wide dissemination of the

tool, saw a 65% suicide reduction rate over 20 months beginning in November 2013. The C-SSRS was administered at every service delivery point during this period. Suicide rates decreased from 3.1 to 1.1 per 10,000 clients (Esposito, 2015).

Perhaps even more critical to the current project, the C-SSRS has proven effective among military personnel. Following wide dissemination and implementation of the C-SSRS tool within the United States Marine Corps in 2014, suicide rates decreased by 22% in a single year (Columbia Lighthouse, 2017).

The C-SSRS has received an endorsement from the Joint Commission, The Department of Defense Suicide Prevention Office, the Food and Drug Administration (FDA), and more than 30 VA Medical Centers across the U.S. (Columbia Lighthouse, 2017). Of particular importance, the FDA recommended in 2012 “that suicidal ideation and behavior be prospectively monitored in all clinical trials, particularly those involving antidepressants” (Food and Drug Administration, 2012). In its 2012 *Guidance for Industry Suicidal Ideation and Behavior: Prospective Assessment of Occurrence in Clinical Trials*, the FDA specifically cites the C-SSRS as a prospective assessment instrument that directly classifies suicidal ideation and behavior into the 11 preferred categories determined by the FDA. Taking it one step further, the FDA states "the instrument performed well relative to other instruments and had high sensitivity and specificity of suicidal behavior classifications relative to another behavior instrument and assessments by an independent suicide evaluation board." (Food and Drug Administration, 2012, p. 5)

The key to the effectiveness of the C-SSRS is targeted dissemination. Evidence supports its use in a variety of settings, but its effectiveness is directly related to the number of individuals with exposure to the tool and simultaneous interaction with populations at increased

risk for suicide. Organizations such as mental health facilities, the military, VA Medical Centers, first responders, and schools operating within the sphere of influence of a potentially suicidal person and choosing to widely disseminate this tool have seen substantial decreases in suicide amongst their members. Recreating these conditions within the Veteran community is a challenging goal but one with the potential for long term, lasting societal change.

Placing Evidence into Practice

The goal of this dissemination effort is two-fold; translate evidence into a community health nursing intervention and serve as a template for future nursing interventions in partnership with a charitable foundation or community organization. Over the course of 18 months, a simple intervention based on research supported evidence was designed in coordination with the faculty of the Yale School of Nursing and the Director of Programs and Scholarships at the Pat Tillman Foundation, a charitable foundation providing scholarships and leadership opportunities for former military members and their spouses. The framework for this intervention was The Advocacy Strategy Framework designed by Coffman & Beer (2015).

Targeted dissemination and use of the C-SSRS within the sphere of influence of the potentially suicidal individual is critical to suicide prevention. The effectiveness of this strategy is based on the results of the Cornerstone and United States Marine Corps C-SSRS interventions. It is no small challenge to recreate similar conditions outside of a mental health organization or a military organization which have a clear chain of command and an attentive audience. The Pat Tillman Foundation, as a Veteran-centric charitable organization, presents a unique opportunity to positively affect the lives of former military members through targeted dissemination of the C-SSRS.

Each April, the Pat Tillman Foundation hosts "Pat's Run," a gathering of more than 30,000 runners dedicated to raising scholarship funds for Veterans and their spouses. This gathering presents a unique opportunity for targeted dissemination of the C-SSRS within a Veteran-centric organization and to the friends and family members of former military members as well as others concerned with the well-being of Veterans. Placing the C-SSRS into the hands of each run participant is a simple, yet critical, community health nursing intervention intended to save lives. Evidence supports the effectiveness of this tool, but only when effectively disseminated to those most likely to encounter a potentially suicidal individual.

The process of partnering with a charitable foundation is both rewarding and time-consuming. The Advocacy Strategy Framework (TASF) authored by Coffman & Beer (2015) provides the community health nurse an established outline for approaching and partnering with a charitable foundation for positive change. TASF challenges the community health nurse to determine how the strategy/intervention is positioned as it relates to the charitable foundation of choice and its prior, current, and future projects and investments.

TASF also requires the community health nurse to determine whom the intervention is attempting to influence as well as the underlying assumptions about how change will happen. Placing the C-SSRS within the sphere of influence of a potentially suicidal Veteran requires no overt action on the part of the friend or family member of the Veteran in crisis, only an assumption of action on an individual's part when faced with a potentially suicidal person. Both the Cornerstone and United States Marine Corps data support this assumption.

Determining who else is working on a similar intervention, how the strategy will stand the test of time, and what steps are necessary to ensure the strategy is on track are the final steps proposed by TASF. For the C-SSRS dissemination intervention, it is unknown if a similar

intervention targeting the vulnerable Veteran population is underway. Ensuring targeted dissemination year to year is the most challenging aspect of this intervention. Partnering with a charitable foundation with numerous financial requests and additional projects already underway is also no small task.

For this project, the Pat Tillman Foundation and its Director of Programs and Scholarships provided unparalleled support for C-SSRS dissemination. Introduction to the concept of using the C-SSRS tool through a major community event was first initiated with the Tillman Foundation 10 months before the event. A proposal was presented to a number of senior leaders of the Tillman Foundation as well as Tillman Foundation Scholarship Alumni to introduce the concept of targeted dissemination of the C-SSRS as a community health intervention. The dissemination concept using the C-SSRS tool was proposed to take place on the posterior aspect of each runner's race bib on the day of "Pat's Run." Space concerns were noted on the part of the event team, and the C-SSRS was then moved to the run program which would be distributed to each of the more than 30,000 runners in the race packet. The continued existence of a paper race day program rather than a smartphone application then placed the dissemination effort on hold and the strategy was again revised. Ultimately, with the help of the Director of Scholarships and Programs, more than 30,000 friends, family members, and other individuals concerned with the health and welfare of Veterans will receive a copy of the C-SSRS as a stand-alone item in their race day packet, meeting the requirement of targeted dissemination as an evidence-based community health nursing intervention. Ensuring continued funding for dissemination at future events has not been determined at the time of publication. Continuation of this intervention year to year will be key to decreasing suicide rates in the vulnerable Veteran population.

Conclusion

Veteran suicide rate reduction is a critical, meaningful goal and direct intervention within the Veteran community will overcome a massive healthcare disparity in this country. It is clear from the evidence that simple reliance on the VA is not an evidence-based strategy. Far too many Veterans are unable or unwilling to receive care from the VA. Community health nurses must recognize this healthcare disparity and address it with preventative measures just as they would any other preventable disease. Creative partnership with a Veterans organization is vital. Just as community health nurses seek out those individuals without access to healthcare, a strategy to meet Veterans where they live, work, and socialize is paramount. Moreover, Veterans organizations can facilitate Veteran access to healthcare in a context of community and trust that will resonate with many Veterans. Community health nurses must seek out Veterans in crisis, and bring healthcare to their doorstep. The reach of the VA Healthcare System is broad, but not all-inclusive. Veteran suicide has reached crisis levels; the community health nurses on the front lines must respond in kind.

Human Subjects Statement

No human subjects participated in any phase of this project.

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References

About the Scale The Columbia Lighthouse Project. (n.d.). Retrieved August 31, 2017, from http://cssrs.columbia.edu/the-columbia-scale-c-ssrs/about-the-scale/

About VA. Retrieved September 29, 2017, from https://www.va.gov/about_va/vahistory.asp

Coffman, J., & Beer, T. (2015, March). The Advocacy Strategy Framework. Retrieved June 17, 2018, from http://www.evaluationinnovation.org/publications/advocacy-strategy-framework

Crum-Cianflone, N. F., Powell, T. M., Leardmann, C. A., Russell, D. W., & Boyko, E. J. (2016). Mental Health and Comorbidities in U.S. Military Members. *Military Medicine, 181*(6), 537-545. doi:10.7205/milmed-d-15-00187

C-SSRS Supporting Evidence. (n.d.). Retrieved September 29, 2017, from http://cssrs.columbia.edu/documents/c-ssrs-supporting-evidence/

Esposito, L. (2015, June 15). Strides in Suicide Prevention. *US News and World Report*.

Food and Drug Administration. (2012). *Guidance for industry suicidal ideation and behavior: Prospective assessment of occurrence in clinical trials*. Retrieved fromhttp://www.fda.gov/downloads/Drugs/GuidanceComplianceRegulatoryInformation/Guidances/UCM225130.pdf

Interian, A., Chesin, M., Kline, A., Miller, R., Hill, L. S., Latorre, M., . . . Stanley, B. (2017). Use of the Columbia-Suicide Severity Rating Scale (C-SSRS) to Classify Suicidal Behaviors. *Archives of Suicide Research,* 1-17. doi:10.1080/13811118.2017.1334610

Maguen, S., Madden, E., Cohen, B. E., Bertenthal, D., Neylan, T. C., & Seal, K. H. (2015). Suicide risk in Iraq and Afghanistan veterans with mental health problems in VA care. *Journal of Psychiatric Research, 68*, 120-124. doi:10.1016/j.jpsychires.2015.06.013

Nelson, H. D., Denneson, L. M., Low, A. R., Bauer, B. W., O'Neil, M., Kansagara, D., & Teo, A. R. (2017). Suicide Risk Assessment and Prevention: A Systematic Review Focusing on Veterans. *Psychiatric Services*. doi:10.1176/appi.ps.201600384

Office of Research & Development. (n.d.). Retrieved February 24, 2018, from https://www.research.va.gov/currents/spring2014/spring2014-25.cfm

Pat Tillman Foundation. (2017). *2017 Impact Report*[Press release].

Pedersen, E. R., Marshall, G. N., & Kurz, J. (2016). Behavioral Health Treatment Receipt Among a Community Sample of Young Adult Veterans. *The Journal of Behavioral Health Services & Research*. doi:10.1007/s11414-016-9534-7

Posner, K. (2018, January 10). Columbia Suicide Severity Rating Scale [Telephone interview].

Posner, K., Brown, G. K., Stanley, B., Brent, D. A., Yershova, K. V., Oquendo, M. A., . . . Mann, J. J. (2011). The Columbia–Suicide Severity Rating Scale: Initial Validity and Internal Consistency Findings From Three Multisite Studies With Adolescents and Adults. *American Journal of Psychiatry, 168*(12), 1266-1277. doi:10.1176/appi.ajp.2011.10111704

Runeson, B., Odeberg, J., Pettersson, A., Edbom, T., Adamsson, I. J., & Waern, M. (2017). Instruments for the assessment of suicide risk: A systematic review evaluating the certainty of the evidence. *Plos One, 12*(7). doi:10.1371/journal.pone.0180292

Suicide Risk in Adolescents, Adults and Older Adults: Screening. (n.d.). Retrieved December 09, 2016, from https://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/suicide-risk-in-adolescents-adults-and-older-adults-screening

Seck, H. H. (2015, April 2). Marine suicides down 22 percent in 2014. Marine Corps Times. Retrieved from https://www.marinecorpstimes.com/story/military/benefits/health-care/2015/04/02/marine-suicides-down-22-percent-2014/70790448/

United States, Department of Veterans Affairs, Office of Suicide Prevention. (2016). *Suicide Among Veterans and Other Americans*.

U.S. Department of Defense. (n.d.). Retrieved January 30, 2019, from https://dod.defense.gov/News/Casualty-Status/

US Department of Veterans Affairs, Veterans Health Administration. (n.d.). Public Health. Retrieved December 09, 2016, from http://www.publichealth.va.gov/epidemiology/reports/oefoifond/health-care-utilization/

Appendix

	In the Past Month
1) Have you wished you were dead or wished you could go to sleep and not wake up?	
2) Have you actually had any thoughts about killing yourself?	
If **YES** to 2, answer questions 3, 4, 5 and 6 If **NO** to 2, go directly to question 6	
3) Have you thought about how you might do this?	
4) Have you had any intention of acting on these thoughts of killing yourself, as opposed to you have the thoughts but you definitely would not act on them?	
5) Have you started to work out or worked out the details of how to kill yourself? Do you intend to carry out this plan?	
Always Ask Question 6	**In the Past 3 Months**
6) Have you done anything, started to do anything, or prepared to do anything to end your life? Examples: Collected pills, obtained a gun, gave away valuables, wrote a will or suicide note, held a gun but changed your mind, cut yourself, tried to hang yourself, etc.	

Any YES must be taken seriously. Seek help from friends, family
If the answer to 4, 5 or 6 is YES, immediately ESCORT to Emergency Personnel for care or call 1-800-273-8255 or text 741741 or call 911

NATIONAL SUICIDE PREVENTION LIFELINE™
1-800-273-TALK (8255)
suicidepreventionlifeline.org

DON'T LEAVE THE PERSON ALONE
STAY ENGAGED UNTIL YOU MAKE A WARM HAND OFF TO SOMEONE WHO CAN HELP

C-SSRS for Friends and Family