Pragmatic Trial of Population-based Programs to Prevent Suicide Attempt

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| **Project Name:**  Pragmatic Trial of Population-based Programs to Prevent Suicide Attempt | |
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| **Principal Investigator institution:**  Kaiser Permanente Washington |  |
| **Funder** NIMH |  |
| **Funding Period:**  09/2014 – 07/2019 |  |
| **Abstract:**  Suicide ranks 10th among all causes of mortality in the US, accounting for over 38,000 deaths in 2010.  Non-fatal suicide attempts result in 600,000 emergency room visits and nearly 200,000 hospitalizations each year.  Recent developments have opened new opportunities to develop and evaluate population-based selective prevention programs for suicidal behavior.  First, increasing use of standard depression severity measures and recording of results in electronic medical records will allow timely and efficient identification of people at risk for suicidal behavior.  Second, efficient and scalable interventions (both structured risk assessment / care management programs and low-intensity emotion regulation skills training) have shown promise for reducing risk of suicide attempt in at-risk populations.  Third, the NIMH-funded Mental Health Research Network has established an infrastructure to adequately evaluate population-based prevention.  We will conduct a large, pragmatic trial to examine two specific selective prevention programs.  Both programs are based in a re-conceptualization of suicidal ideation as an enduring vulnerability rather than a short-term crisis.  The trial will be conducted in 4 large, integrated health care systems. We propose to enroll up to 19,500 adults for whom responses to item 9 of the PHQ depression scale (regarding thoughts of death or suicide) indicate elevated risk.  Participants will be randomly assigned to continued usual care or usual care supplemented by one of the two prevention programs:   * An outreach and care management program (via secure messaging and telephone) including structured assessment linked to specific care pathways. * An online psychoeducational program focused on development of emotion regulation skills and prevention of suicidal behaviors, supported by coaching to promote engagement and adherence.   Both programs are supplements to usual care.  Both programs will capitalize on existing electronic records to improve efficiency and assure quality.  The primary outcome will be suicide attempt (fatal or non-fatal) during 18 months following enrollment – ascertained automatically from computerized records.  A pragmatic trial of selective prevention would fill a major gap in current suicide prevention efforts.  Methods developed in this trial should dramatically accelerate future suicide prevention research. |  |
| **Grant Number:**  UH3007755 |  |
| **Participating Sites:**  Kaiser Permanente Northwest Kaiser Permanente Colorado HealthPartners |  |
| **Investigators:** Greg Simon, MD Rebecca Rossom Arne Beck Greg Clarke |  |
| **Major Goals:** To conduct a large, pragmatic trial to examine two population-based programs to prevent suicide attempt.  Participants will be randomly assigned to continued usual care or usual care supplemented by one of the two prevention programs: an outreach and care management program (via secure messaging and telephone) including structured assessment linked to specific care pathways, or an online psycho-educational program focused on development of emotion regulation skills and prevention of suicidal behaviors, supported by coaching to promote engagement and adherence.  The primary outcome will be suicide attempt (fatal or non-fatal) during 18 months following enrollment – ascertained automatically from computerized records.  The trial will be conducted in 4 health systems: Group Health Cooperative, Kaiser Permanente Colorado, Kaiser Permanente Northwest and HealthPartners. |  |
| **Description of study sample:** Adult outpatients who completed a PHQ depression questionnaire in the previous week and reported thoughts of death or self-harm "most of the days" or "nearly every day." |  |
| **Current Status:**  15,517 participants have been enrolled and randomized as of March 30, 2018. |  |
| **Study Registration:**  NCT02326883 |  |
| **Publications:** Simon GE, Beck A, Rossom RC, Richards JR, Kirlin B, Shulman L, King D, Ludman EJ,   Penfold R, Shortreed SM, Whiteside US. [Population-Based Outreach Versus Care As Usual To Prevent Suicide Attempt: Study Protocol for a Randomized Controlled Trial](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5025595/).  Trials. 2016 Sep 15;17(1):452.  Whiteside U, Lungu A, Richards J, Simon GE, Clingan S, Siler J, Snyder L, Ludman E. [Designing messaging to engage patients in an online suicide prevention intervention: survey results from patients with current suicidal ideation](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3936268/). J Med Internet Res. 2014 Feb 7;16(2):e42. |  |
| **Resources:** Specifications for defining suicide attempts are available at: <https://github.com/MHResearchNetwork/MHRN-Central> |  |
| **Lessons Learned:**  Transferring registry tools between health system Epic EMRs was more complicated than anticipated. |  |
| **What’s next?**  Recruitment is expected to continue through spring/summer 2018. |  |