

# Suicide Prevention Outreach Trial (SPOT)

## Principal Investigator

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## NIH Institutes Providing Oversight

- National Institute of Mental Health (NIMH)

## ClinicalTrials.gov Identifier

[NCT02326883](https://clinicaltrials.gov/ct2/show/study/NCT02326883)

## Sponsoring Institution

Kaiser Permanente Washington Health Research Institute

## Collaborators:

- HealthPartners Institute for Education and Research
- Kaiser Permanente Colorado
- Kaiser Permanente Northwest
- Kaiser Permanente Washington

## DATA AND RESOURCE SHARING

- [Data sharing checklist](#)
- Simon GE, Shortreed SM, Rossom RC, et al. Effect of offering care management or online dialectical behavior therapy skills training vs usual care on self-harm among adult outpatients with suicidal ideation: a randomized clinical trial. *JAMA*. 2022 Feb 15;327(7):630-638. doi: 10.1001/jama.2022.0423. [PMID: 35166800](#).

## STUDY AT A GLANCE



### STUDY QUESTION AND SIGNIFICANCE

People at risk of self-harm or suicidal behavior can be accurately identified, but effective prevention will require effective scalable interventions. The objective of this study was to compare 2 low-intensity outreach programs with usual care for prevention of suicidal behavior among outpatients who report recent frequent suicidal thoughts.



### DESIGN AND SETTING

Pragmatic, randomized clinical trial with 18,882 outpatients reporting frequent suicidal thoughts identified using routine Patient Health Questionnaire depression screening at 4 US integrated healthcare systems between March 2015 and September 2018, with follow-up continued through March 2020.



### INTERVENTION AND METHODS

The study compared 2 low-intensity outreach programs—care management and dialectical behavior therapy skills training—to usual care. The primary outcome was time to first nonfatal or fatal self-harm event. Secondary outcomes included more severe self-harm (leading to death or hospitalization) and a broader definition of self-harm (selected injuries and poisonings not originally coded as self-harm).



### FINDINGS

The percentage of fatal or nonfatal self-harm events was 3.1% for those receiving usual care, 3.3% for patients offered care management, and 3.9% for patients offered dialectical behavior therapy skills training. The risk of self-harm varied with patients' level of intervention participation. In both intervention groups, patients who actively declined intervention services had the lowest risk of self-harm. Patients who did not respond to the invitation to participate or who actively participated for more than 3 months had intermediate risk. Patients who initially participated in the intervention but continued for less than 3 months had the highest risk.



### CONCLUSIONS AND RELEVANCE

Offering care management to adult outpatients experiencing suicidal ideation did not reduce their risk of self-harm compared to usual care. Patients offered dialectical behavior therapy skills training had significantly greater risk of self-harm compared to usual care.

## GENERALIZABLE LESSONS

Challenge	Solution
Transition from ICD-9 to ICD-10 shortly after trial started	Chart reviews were needed to refine and revalidate outcome definitions.
Engaging high-risk individuals in suicide prevention programs who were not seeking out these programs	An important finding of the study was that presenting the interventions to these individuals may not have been helpful. Future research is needed to understand how best to engage individuals at high risk in interventions that will improve their outcomes.

*“Pragmatic trials are intended to inform practical decisions. We do pragmatic trials to inform a choice that people actually are making or will need to make in everyday healthcare. So I encourage people to think about: Who is the decider you are trying to inform? Who’s the decision maker you’re trying to help? What actual choice do they likely face? What information can they bring to bear on that choice? What do they not know? That should guide all the decisions about the design of a pragmatic trial.”*  
— Dr. Greg Simon

*“People in the [NIH Collaboratory] are studying a wide range of clinical conditions and different types of treatment. I’m a psychiatrist; I study mental health interventions. What might I learn from somebody who’s studying dialysis or somebody who’s studying bathing patients to prevent infections in hospitals? Sometimes you can learn the most from that thing which is not the place where you would look.”*  
— Dr. Greg Simon

## ADDITIONAL RESOURCES

- Article: [Connecting Research and Practice: Implementation of Suicide Prevention Strategies in Learning Health Care Systems](#)
- Article: [Designing Messaging to Engage Patients in an Online Suicide Prevention Intervention: Survey Results from Patients With Current Suicidal Ideation](#)
- Article: [Reconciling Statistical and Clinicians’ Predictions of Suicide Risk](#)
- Article: [Improving Pragmatic Clinical Trial Design Using Real-World Data](#)
- Video Interview: [Update on the SPOT Demonstration Project](#)

Access the complete set of [SPOT resources](#).