

PCORI Virtual Briefing

Suicide Prevention in Youth

Wednesday, February 23, 2022
2:00-3:00 pm ET

Speakers

Opening Remarks (Recorded)



Rep. Jamie Raskin
(D-MD)



Rep. Ashley Hinson
(R-IA)



Nakela Cook, MD, MPH
Executive Director, PCORI

Speakers

Panelists



Jill Harkavy-Friedman, Ph.D.
Vice President of Research, American Foundation for Suicide Prevention



Joan Asarnow, Ph.D.
Professor, Psychiatry and Biobehavioral Sciences, UCLA;
Director, UCLA Youth Stress & Mood Program



Anna Radin, DrPH, MPH
Applied Research Scientist, Applied Research Division, St. Luke's Health System

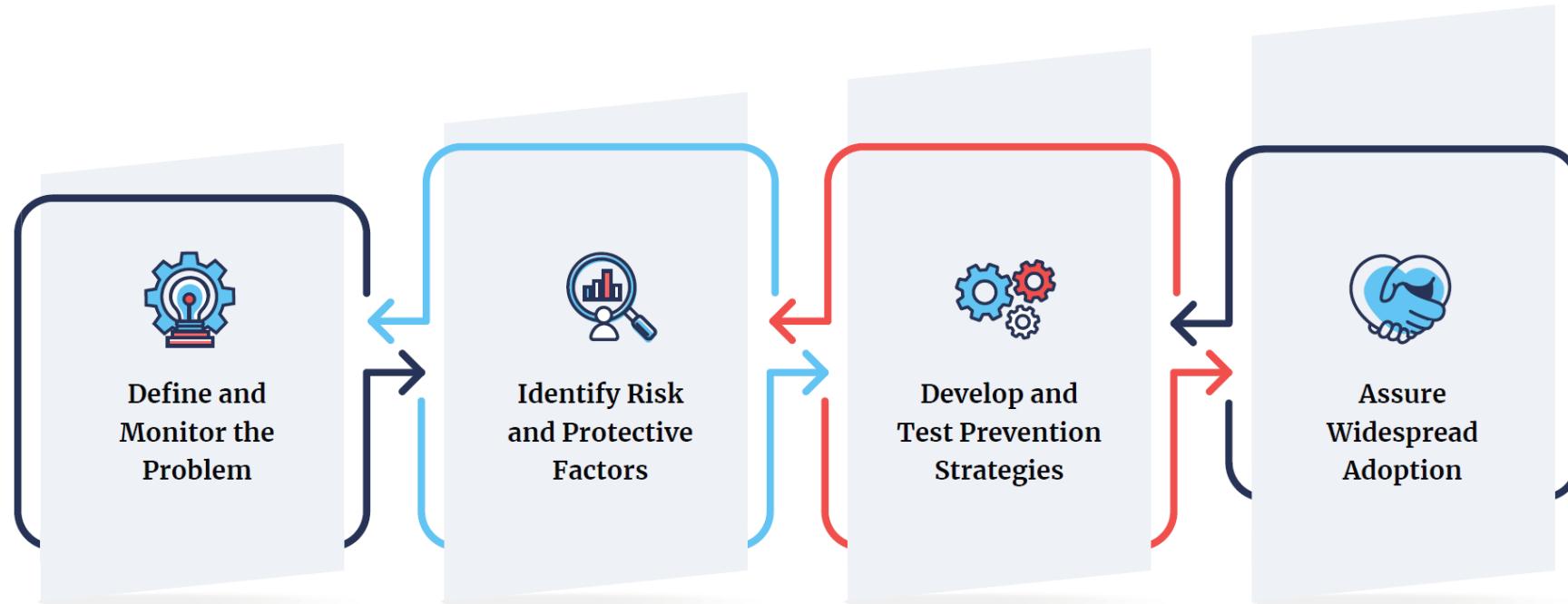
Suicide Prevention Research: PCORI Brings Benchtop to Bedside

Jill Harkavy-Friedman, PhD

February 23, 2022



Public Health Approach to Suicide Prevention



<https://www.cdc.gov/violenceprevention/about/publichealthapproach.html>

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Define and Monitor the Problem

Many people think of suicide (12M)

Some people attempt suicide (1.3M)

Fewer people die by suicide (45,979)

While there is overlap, people who die by suicide differ from people who attempt suicide and from those who have thoughts of killing themselves and don't act on them

Knowing these differences will help us prevent suicide

SAMHSA, NSDUH, accessed 2/17/2022 referring to 2021

CDC, WISQARS, accessed 2/17/2022 referring to 2020

Identify Risk and Protective Factors

Risk Factors and Precipitants

Previous Suicidal Behavior

Mental Health

Physical Health

Brain function leading to inflexible thinking

Historical Factors- family history, trauma, abuse, neglect

Traumatic brain injury

Life stressors

Access to lethal means

Protective Factors

Resilience

Social and problem-solving skills

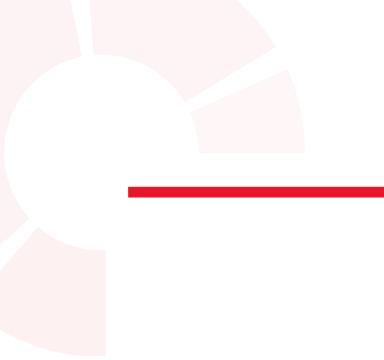
Connection

Social support

Willingness to participate in mental health care

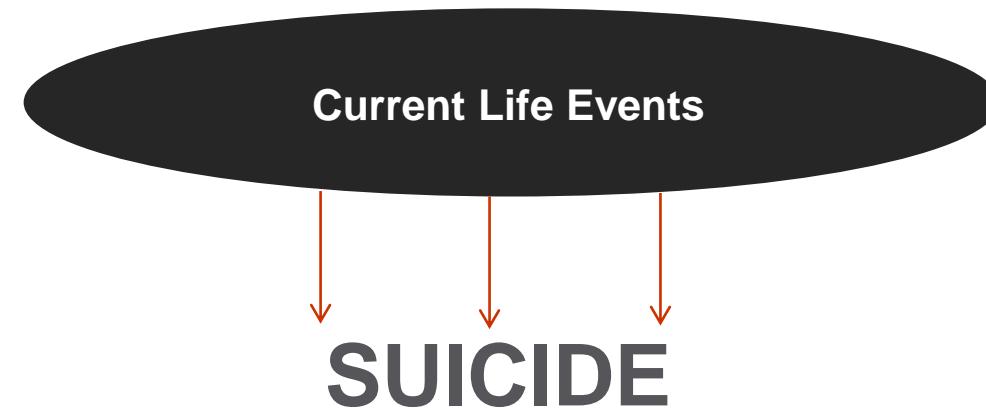
Access to mental health care

<https://www.nimh.nih.gov/health/topics/suicide-prevention>



There is never one single cause of suicide

Interacting Risk and Protective Factors



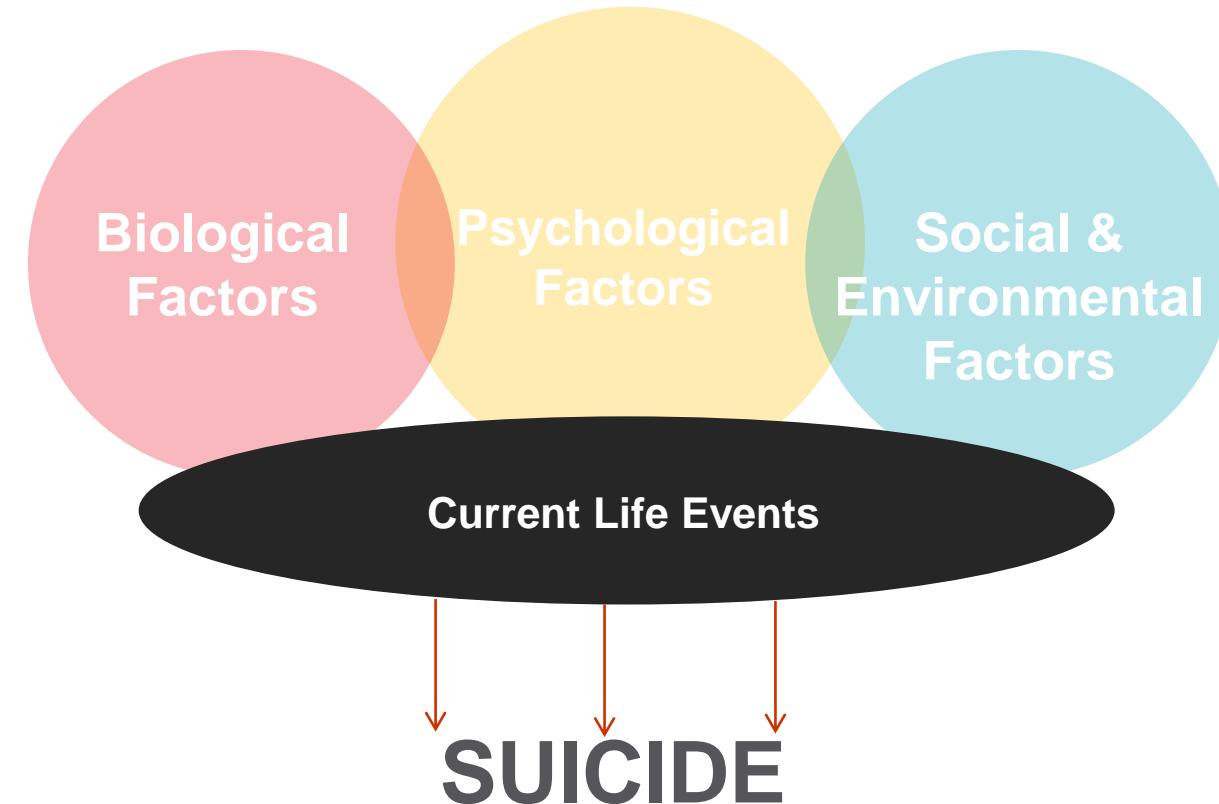
Moutier and Harkavy-Friedman, 2014

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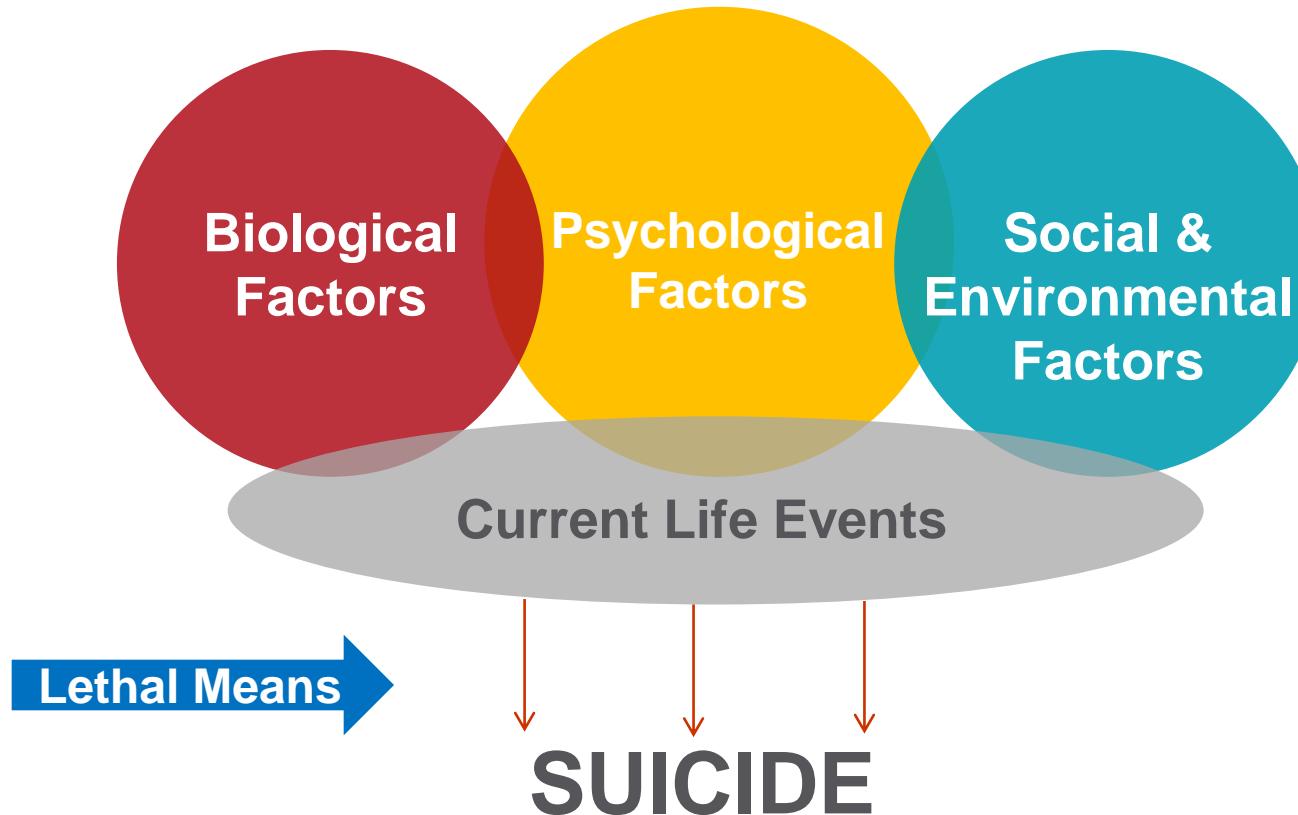
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Interacting Risk & Protective Factors



Moutier and Harkavy-Friedman, 2014

Interacting Risk & Protective Factors



Moutier and Harkavy-Friedman, 2014

People at risk for suicidal behavior evidence

Difficulty problem solving

Difficulty shifting gears

Difficulty seeing strategies for coping

- **Pain, hopelessness, desperation**

Suicide is related to brain functions that affect decision making and behavioral control, making it difficult for people to access their usual coping to find positive and effective options

Develop and Test Prevention Strategies

Interventions Focus on Decision Making and Problem Solving

- Safety Planning (SPI)
- Collaborative Assessment and Management of Suicidality (CAMS)
- Cognitive Behavior Therapy-Suicide Prevention (CBT-SP)
- Dialectical Behavior Therapy (DBT)
- Attachment Based Family Therapy (ABFT)

<https://www.nimh.nih.gov/health/topics/suicide-prevention>

Assure Widespread Adoption

Patient-Centered Outcomes Research Institute (PCORI)

Improve the quality and relevance of evidence available to help patients, caregivers, clinicians, employers, insurers, and policy makers make better-informed health decisions. To do this, we work with those healthcare stakeholders to identify critical research questions and answer them through comparative clinical effectiveness research, or CER, focusing on outcomes important to patients. We also disseminate the results in ways that members of the healthcare community will find useful.

<https://www.pcori.org/about/about-pcori>

Thank You!

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@afspnational

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The SPARC Trial & Suicide Prevention in Youth and Young Adults

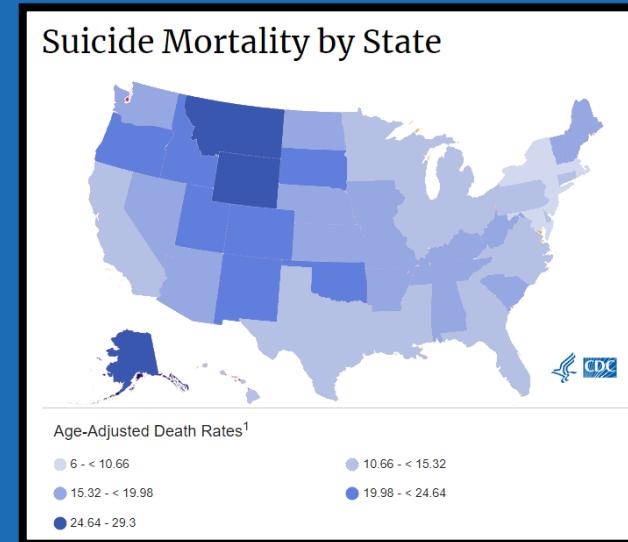
Principal Investigator:

Anna Radin, DrPH, MPH, Research Scientist, Applied Research Division



1 Life
Every 12 Mins

*Suicide is a
leading cause of death
in the United States¹*



*Residents of Intermountain West
states and rural areas face
greatest risk^{2,3}*

9th Highest in US

*Idaho has one of the **highest
suicide rates** in the country²*

1/2

of people
who die by suicide
visit their healthcare provider
within a month
of their death⁴

We can do better.

Research Question



What is the best brief suicide prevention intervention for adults and adolescents who screen positive for suicide risk in emergency departments and primary care clinics?



SPI+

**Safety planning +
structured phone follow-up**
from Idaho Suicide Prevention Hotline

VS.

CC

**Safety planning +
caring contacts**
from Idaho Suicide Prevention Hotline

What is SPI+?

Safety Planning Plus Structured Phone-Based Follow-Up

- Up to 6 phone calls from ISPH over 3 months to:
 - ✓ *Review and revise safety plan*
 - ✓ *Support treatment engagement*
 - ✓ *Address barriers to attending BH treatment*
 - ✓ *Connect with resources to address risk factors*
- Patients may opt out of additional calls or may request additional calls beyond the 6 “standard” calls



Compared to patients who received usual care,
patients who received the safety planning intervention + were⁵

1/2 as likely to engage
in suicidal behavior

2X as likely to attend
outpatient treatment

Caring Contacts Intervention

Series of non-demanding expressions of care

- Letters or postcards (Motto)
- Two-way text messages (Comtois)

The anatomy of a good caring contact

- ✓ Nice, with no expectations
- ✓ Non-demanding (no questions)
- ✓ Neutral tone
- ✓ Frequency tapers over time



Caring Contacts

Text Chat Example

Hi there, Rachel. Just checking in, feel free to text me back if you feel like it.

I'm doing okay. I still want to die. And I overdosed last week. And I threw it up.

I'm so sorry to hear that you're still feeling like you want to die, Rachel. But I'm so glad to hear that you are ok. I know you've been going through a lot and have been struggling. I'm here for you!

It's okay. And thank you.

Would you tell me a little more about wanting to die?
Are you thinking of suicide again/still?

I want to overdose again. But my mom took all my meds away from me. I'm just so tired of life. I want it to be over already.

Thanks for sharing that Rachel. That is such a painful place to be in. Would it help to talk through how you're feeling on a phone call? I'll be in the office on Sunday, or I can have a colleague call you and check in on you today. I want to make sure I'm supporting you in whatever method is best for you!



Caring Contacts

Text Chat Example

Matt, thinking about you this week and hoping things are going well for you.

Thank you

of course. hoping good things come your way today and through the weekend. I'm here if you need to talk.

I'm doing pretty bad

I'm glad you texted, Matt. I'm here to listen if you want to share more. (we can set up a time to talk on the phone if you prefer).

I don't know

things have been rough lately. Did something happen recently that's caused you to feel worse than usual?

I don't know lots of things

I know it can be hard to pinpoint a specific thing and that's okay. I want to first make sure that you're safe- are you having thoughts of suicide today?

Yes



Caring Contacts

Text Chat Example

Sending you positive vibes, Kelly.

Hey there, Kelly. Just thinking of you today.

Thank you, today is a mixed day.

Thank you for sharing, Kelly. I want you to know that I care about you, and I hope the good outweighed the bad.

Hope you're doing well, Kelly. Feel free to text me back if you feel like it.

Today is a good day. I'm just generally happy.

Yay! I'm glad to hear that, Kelly! I hope you find some time to play Final Fantasy. :D



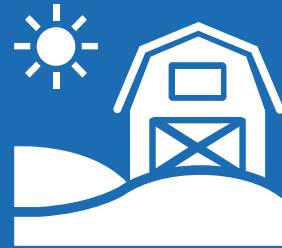
Compared to patients who received usual care,
patients who received the caring contacts intervention were⁶

44% less likely to have
suicidal thoughts

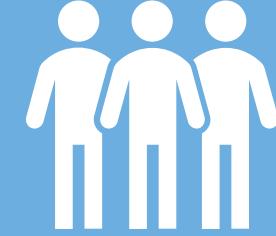
48% less likely to attempt suicide



Mountain West²



Rural & Frontier³



Civilian population

Why St. Luke's Health System?



Adolescents



Primary Care + ED

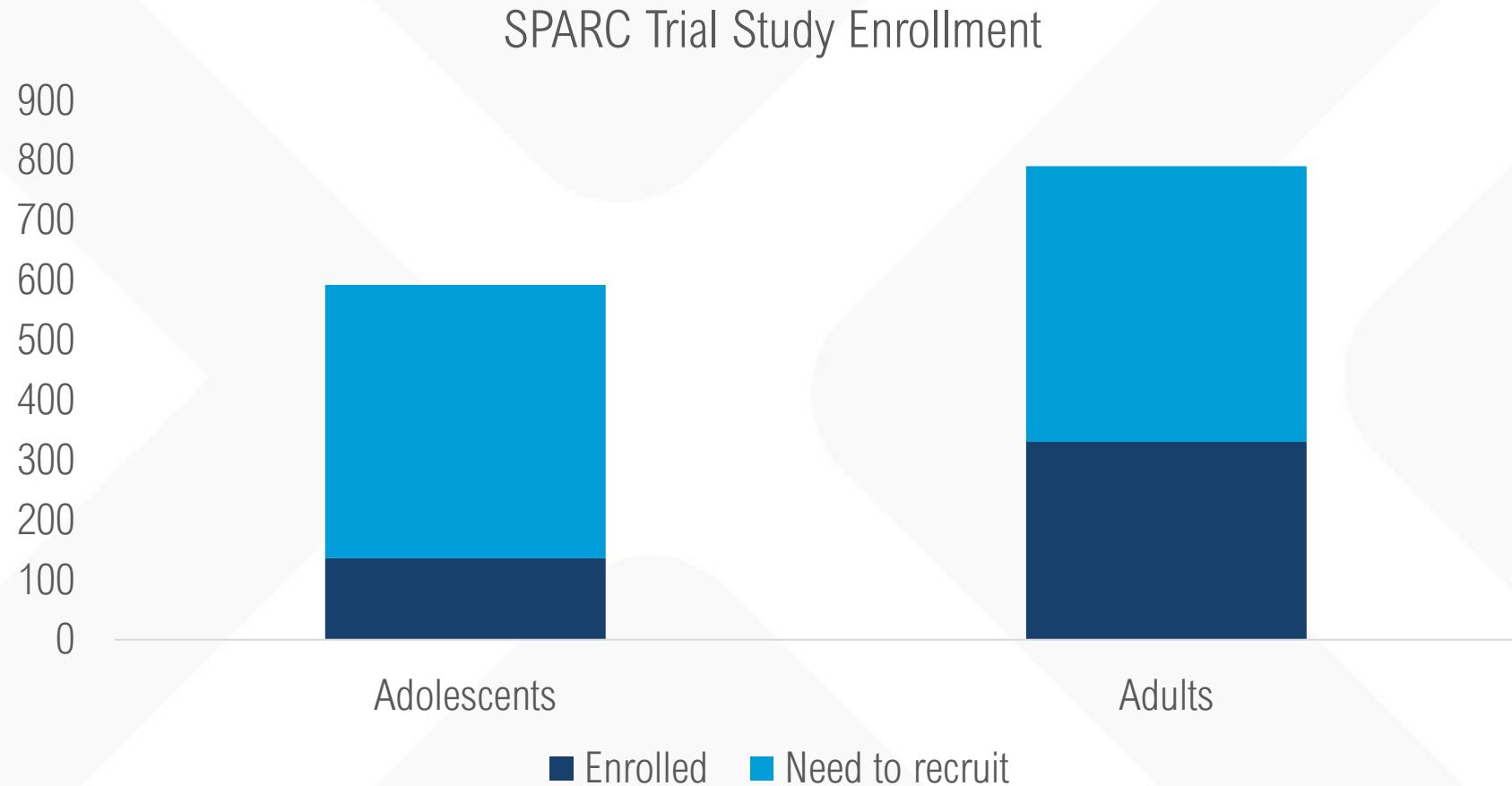


Full risk spectrum

SPARC: What we have learned so far

SPARC Enrollments

Total sample size: 1,382
Adults: 790
Adolescents: 592



SPARC Follow-Up Support Feedback

From SPARC participants (n=175)

99%

Of SPARC participants report that the SPARC follow-up phone calls are helpful and would recommend them to a friend

95%

of SPARC participants report that the SPARC follow-up text messages are helpful and would recommend them to a friend

thank you for always being there for me even if i don't respond (and it's your job) i really appreciate you and don't think i'd be as stable without you being here. | Thanks for the text you made my day | Thank you for caring. It's so rare. | I'm glad we were able to connect too. I have to say it really does offer some hope in a time that lately has seemed hopeless. | It's really nice to have somebody much better. I still have gone upside down in the your work. | Really appreciate you sending tomorrow with counsel I've been on my new n She was so happy you the call. It helped me in going to make some big things to myself until I blow up so I really appreciate for allowing me to do that. I de Thank you so much for that, it really did help | Thank you for being so kind. I haven't fo weeks. I'll text you soon. | Having someone check up on me helps. Even if it's for a study. Which is what helps :) | Thank you so much! I'm traveling today and I really appreciate your t everyone involved is truly concerned. | I really appreciate this service and am thankful for all your help. | I appreciate the persons willingness check in with me weekly is really helpful then I expected them to. | they have the extra contact has let me know that listen and Jennifer did that. She also is a very genuine and caring person. be so honest about what I'm feeling o need to just keep doing what you are spent a lot time listening and I really circumstance. | I feel very good that what you are doing is really great! I hope it w many people. | Danny is wonderful and I feel safer having him a text or phone call away

Having the extra contact has let me know that other people care and I don't have to worry about everything by myself.

It was great talking with Hannah. I felt that she was truly connecting with me and supporting me.

Thank you for always being there for me... I really appreciate you and don't think I'd be as stable without you being here

That text actually meant the world to me

Lessons learned so far

- High patient satisfaction with both interventions
- Successful community partnership with ISPH – great potential for other states
- Referral process needs to be simple
- Scheduling phone calls with 12-17 year olds is challenging
 - ✓ *Many have strong preference for texts vs voice calls*
- Feasible to implement 2-way texting without 24/7 dedicated staffing
 - ✓ *PLES Advisory Board recommended against auto-replies*
 - ✓ *Partner with ISPH; phone room supervisors monitor incoming texts for potential crises*
 - ✓ *Important to communicate clearly about when incoming texts are monitored/responded to*



Acknowledgments

St. Luke's Health System

- SPARC Research Team – Jenny Shaw, Dr. Hilary Flint, Tara Fouts, Betsy McCue, Anton Skeie, Cecelia Pena, Jonathan Youell
- Research Department – Nicole Russell, Bradi Hutchison, Janet Hines, Dr. Jim Loveless, Katelyn Penney, Jeanette Gibbon
- Behavioral Health – Jake Wilson, Amelia Doty-Jones, Megan Stright, Dr. Mike Walton, Michelle Ross, Fallon Baraga
- Executive Sponsors – Dr. Jim Souza, Dr. Bart Hill
- PC Referring Providers and ED + PC SW Teams

Idaho Suicide Prevention Hotline

- Jessica Torres, Danny Sandoval, Hannah Lemon, Jennifer Hartmann, Maggie Harper, Matthew Biss, Lee Flinn, George Austin

University of Washington

- Dr. Kate Comtois – Center for Suicide Prevention & Recovery & Dept of Psychiatry
- Dr. Anna Ratzliff & Diane Powers – AIMS Center & Dept of Psychiatry
- Dr. Siobhan Brown & Dr. Gary Chan – Department of Biostatistics
- Dr. Ann Melvin & Mike Donahue – ITHS /DMC

People with Lived Experience with Suicide Advisory Board

- Amanda Lehto, Ashley Johnson, Brittany Kent, Betsy Hammar, Ismael Turcois, Janet Hoeke, Katrina Chase, Kendra Nicolaysen, Nick Fandell, Talitha Fagen, Vanessa Sinclair
- LCSW Support: Alana Brunner, Jeremy Stockett

SPARC Participants



References

1. Centers for Disease Control & Prevention (CDC). Web-based Injury Statistics Query and Reporting System (WISQARS). (2018) Atlanta, GA: National Center for Injury Prevention and Control. Available online at: <https://www.cdc.gov/injury/wisqars/index.html>.
2. Centers for Disease Control & Prevention (CDC). Suicide Mortality by State, 2019. (2022) Atlanta, GA: National Center for Health Statistics. Available online at: <https://www.cdc.gov/nchs/pressroom/sosmap/suicide-mortality/suicide.htm>.
3. Ivey-Stephenson A, AE C, Jack S, Haileyesus T, Kresnow-Sedacca M. Suicide trends among and within urbanization levels by sex, race/ethnicity, age group, and mechanism of death, United States, 2001-2015. *Morbidity and Mortality Weekly Report*. 2017.
4. Ahmedani BK, Simon GE, Stewart C, et al. Health care contacts in the year before suicide death. *J Gen Intern Med*. 2014;29(6):870-877.
5. Stanley, Brown, et al. Comparison of the Safety Planning Intervention with Follow-up vs. Usual Care of Suicidal Patients Treated in the Emergency Department. *JAMA Psychiatry*, 2018. 75(9): 894-900.
6. Comtois KA, Kerbrat AH, DeCou CR, et al. Effect of Augmenting Standard Care for Military Personnel With Brief Caring Text Messages for Suicide Prevention: A Randomized Clinical Trial. *JAMA Psychiatry*. February 2019. doi:10.1001/jamapsychiatry.2018.4530



Thank you!

YOUTH PARTNERS IN CARE FOR SUICIDE PREVENTION

PCORI SP-2020C3-21078, Funded Jan 1, 2022

UCLA

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Thomas Belin, PhD

Lucas Zullo, PhD

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Olive View-UCLA Medical Center

Naser Ahmadi, MD

Brent Matsunaga MD

RAND Survey Research Group

Rosa-Elena Garcia, MPH

Stakeholders

Clinicians/Policy Makers

EM: Mohsen Saidinejad; David Schriger

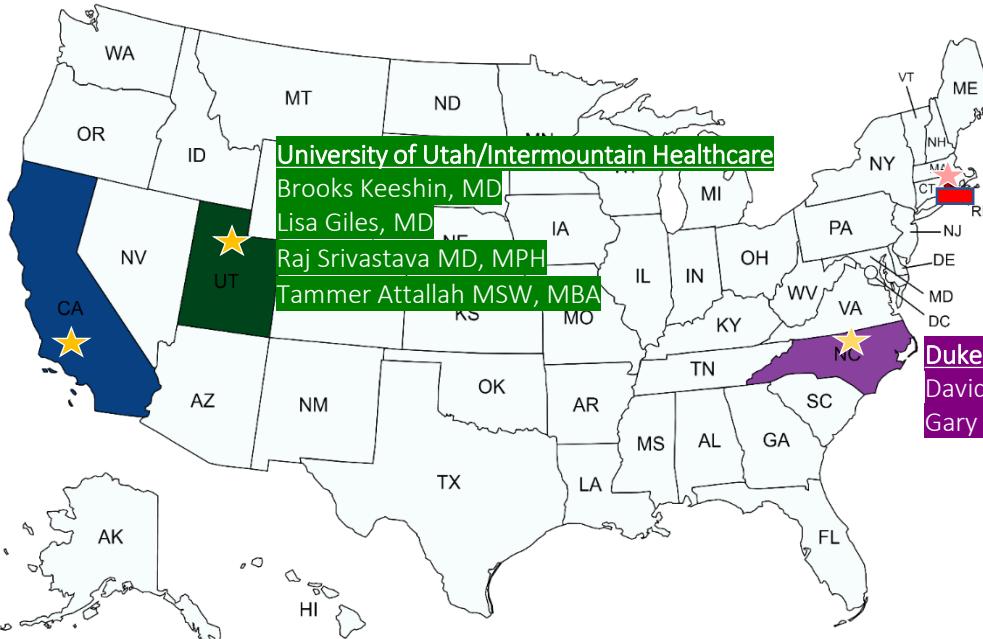
Psychiatry: Gabrielle Carlson; Argelinda Baroni; Arthur Kelly; Marcy Forgey Borlik

Pediatrics: Moira Szilagyi

Psychology: Sally Horowitz; Claudia Avina; Stephen Hinshaw

Public Health/Insurance: Jeffrey Hill, Michael Brodsky; Ish Bhalla

Policy: Deborah Stone; Jill Harkavy-Friedman



Health Equity & Intervention Adaptation Team

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Butler Hospital

Ivan Miller, PhD

Brandon Gaudiano, PhD

Duke University

David Goldston, PhD

Gary Maslow, MD

Stakeholders- Patient/Family

Felica Jones

Carla Carlisle

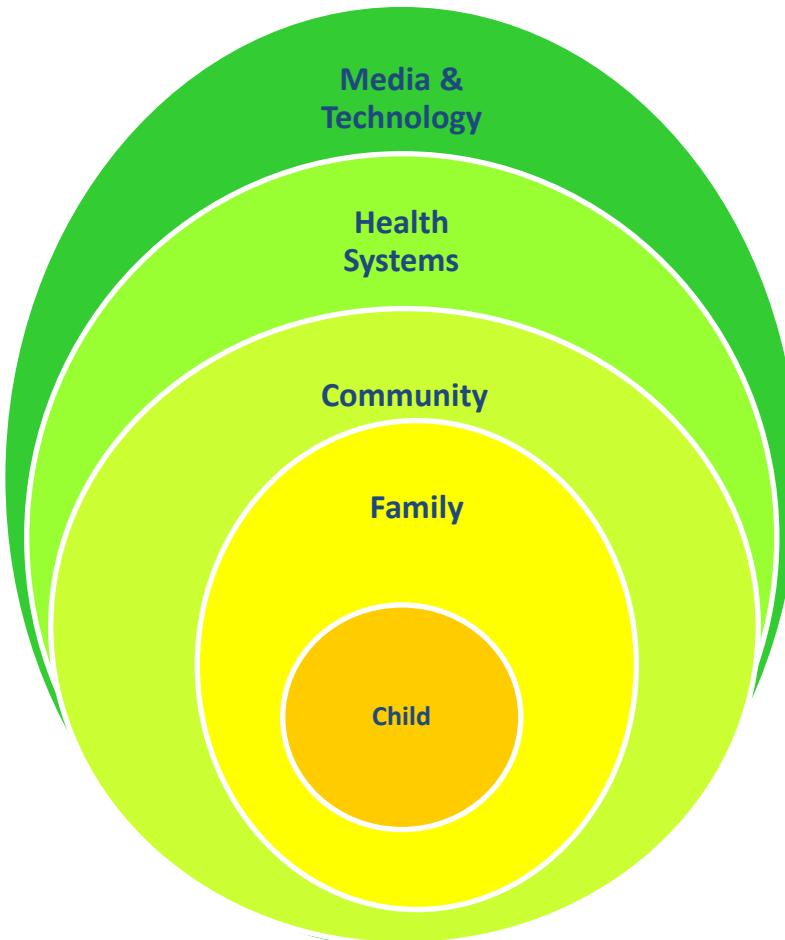
Chantel Garrett

Taryn Hiatt

John Cooper

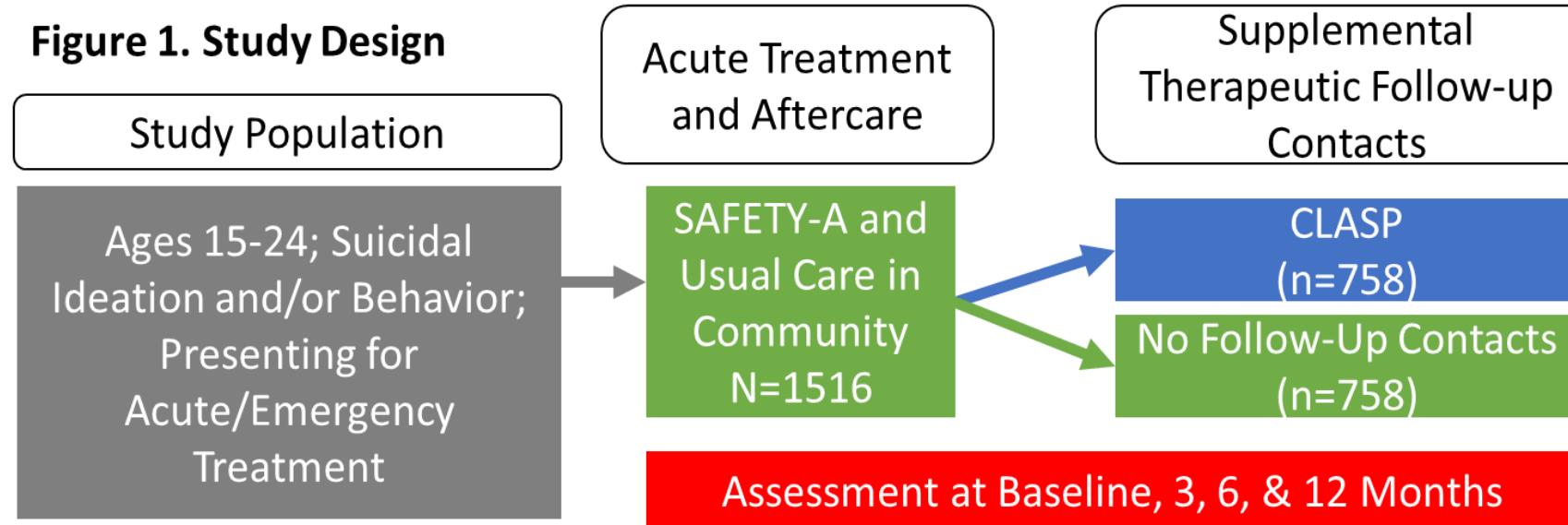
Presenter: Joan R Asarnow, PhD; Professor of Psychiatry & Biobehavioral Sciences, UCLA

Can we mobilize our health systems, communities, and families to provide protective seatbelts when youth are experiencing hopelessness and unbearable pain and promote healthy connections and reasons for living?

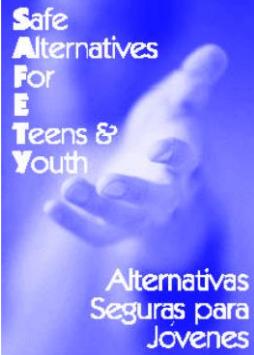


PCORI: Youth Partners in Care for Suicide Prevention (YPIC-SP)

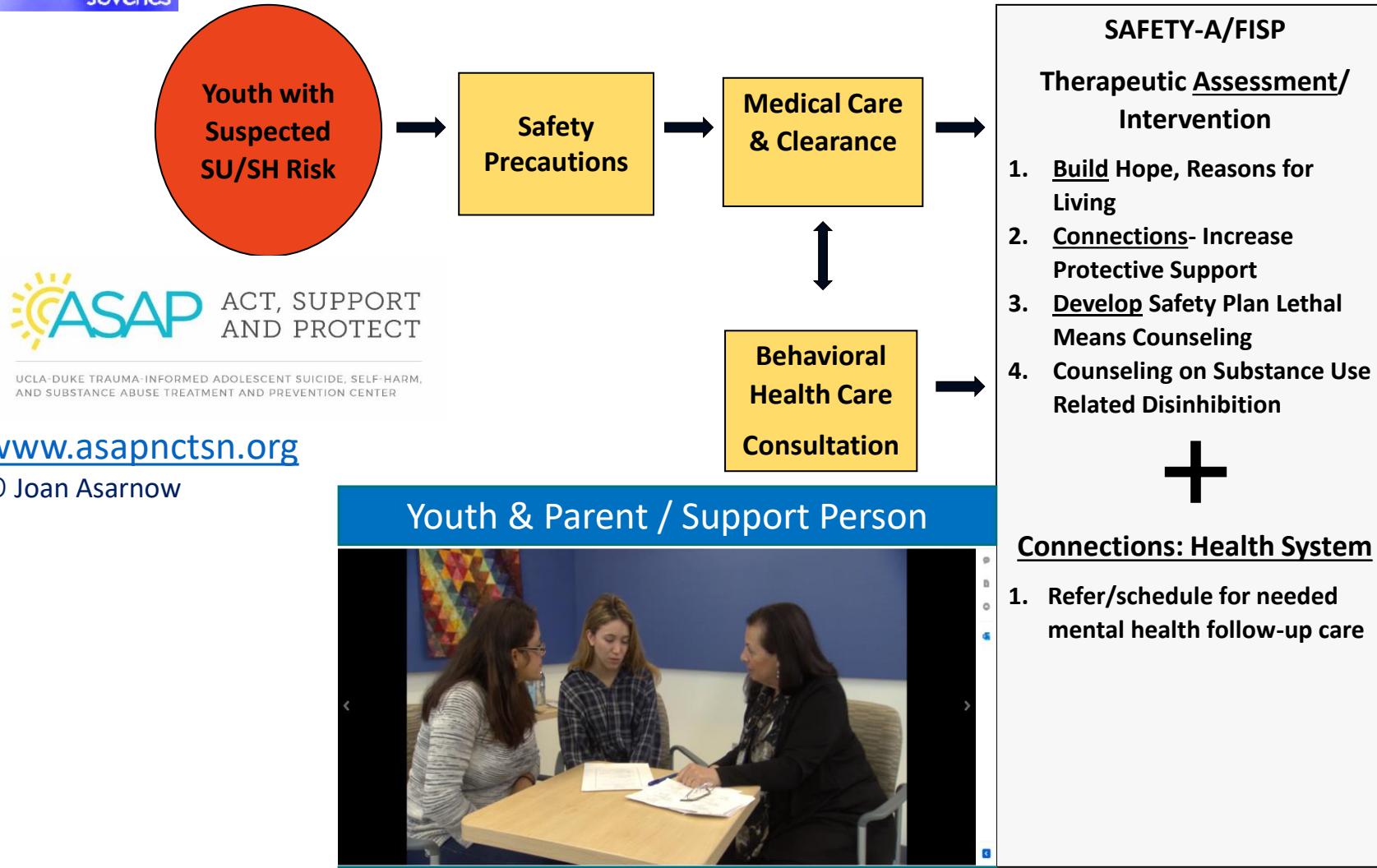
Addresses an Important Evidence Gap: Is it sufficient to focus on the ED intervention? Or after a suicidal episode, can we reduce the risk of subsequent and potentially more deadly attempts by adding post-episode therapeutic contacts to a single session ED intervention that focuses on safety and stabilizing the young person in the ED?



Compares 2 evidence based approaches: SAFETY-A vs Combined SAFETY-A + CLASP
SAFETY-A & CLASP use a risk reduction framework (as in heart disease), assumes that modifying risk factors and promoting protective factors improves outcomes.

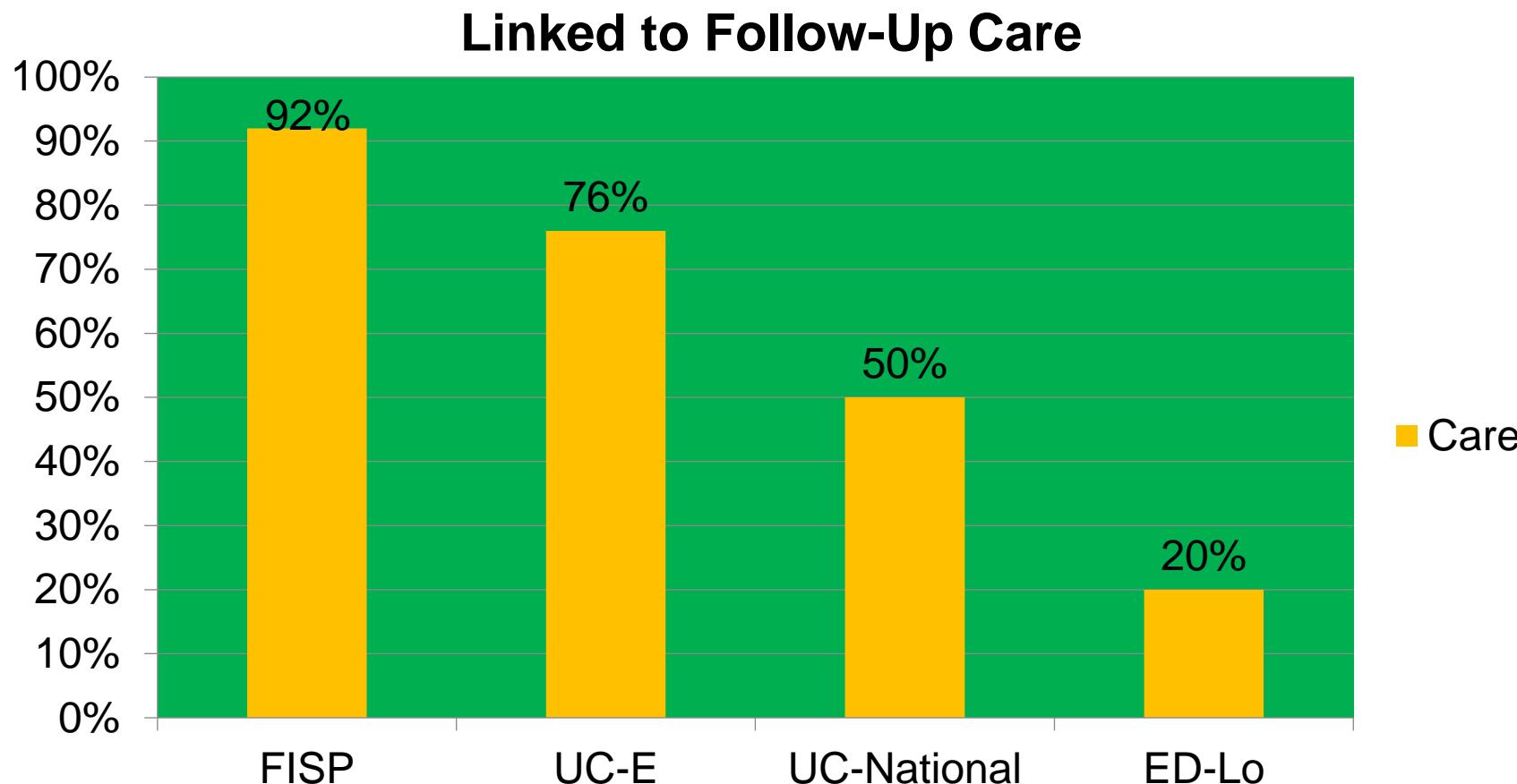


SAFETY-Acute (FISP): Delivered in ED



IMPROVED CONTINUITY OF CARE

Objective 8.4, National Strategy for Suicide Prevention (2012)

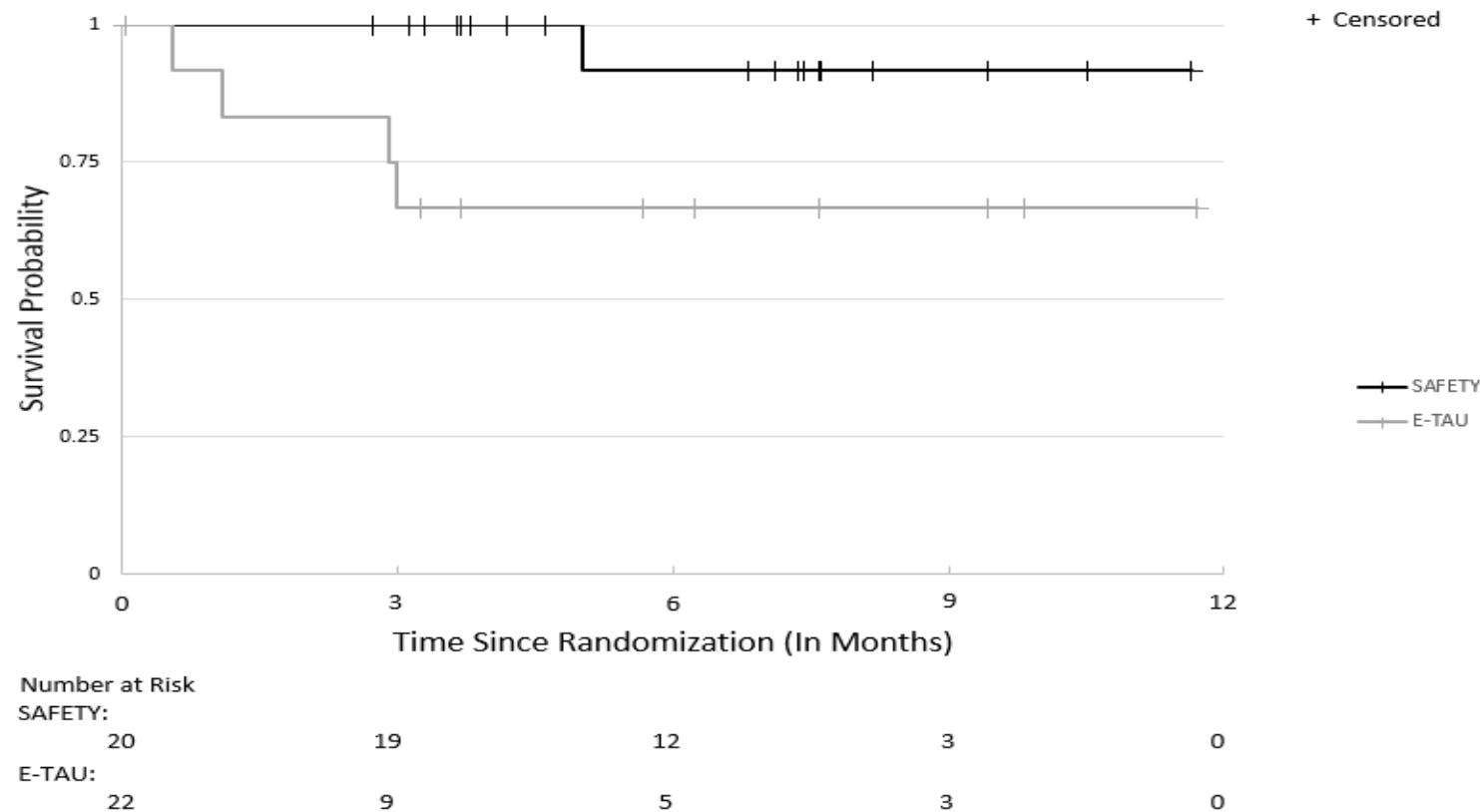


Asarnow JR, Baraff LJ, Berk M, et al. (2011). An emergency department intervention for linking pediatric suicidal patients to follow-up mental health treatment. Psychiatr Serv. 2011 Nov;62(11):1303-9.

Funding: CCR921708, CDC

Higher probability of survival without a suicide attempt for youths randomized to SAFETY vs. Enhanced-TAU:

1.00 vs. 0.67, $p < .02$, NNT=3 at 3-months; 0.92 vs. 0.67 at 365 days;
Wilcoxon $X^2(1) = 5.81$, $p < .02$



Asarnow, J. R., Hughes, J. L., Babeva, K. N., & Sugar, C. A. (2017). Cognitive-behavioral family treatment for suicide attempt prevention: a randomized controlled trial. *Journal of the American Academy of Child & Adolescent Psychiatry*, 56(6), 506-514. N=42

Funding: NIMH R34 MH078082, AFSP

PCORI: Youth Partners in Care for Suicide Prevention (YPIC-SP)

Los Angeles, Utah, Rhode Island, North Carolina, RAND

“When I had surgery they called the next day to see how I was doing. When I went to the hospital for my son’s suicide attempt it was ‘radio silence.’ What they did in the hospital wasn’t enough. My son was still hurting and he didn’t want to go to the therapist. I didn’t know what to do.”



CLASP: Therapeutic Follow-Up

Contacts by telephone with text/email messaging

- Maintain connection with caring provider
- Risk monitoring
- Values Clarification
- Short Term Goal Setting
- Safety Planning
- Next Steps & care



NIMH R34 MH073825
RO1 MH101129

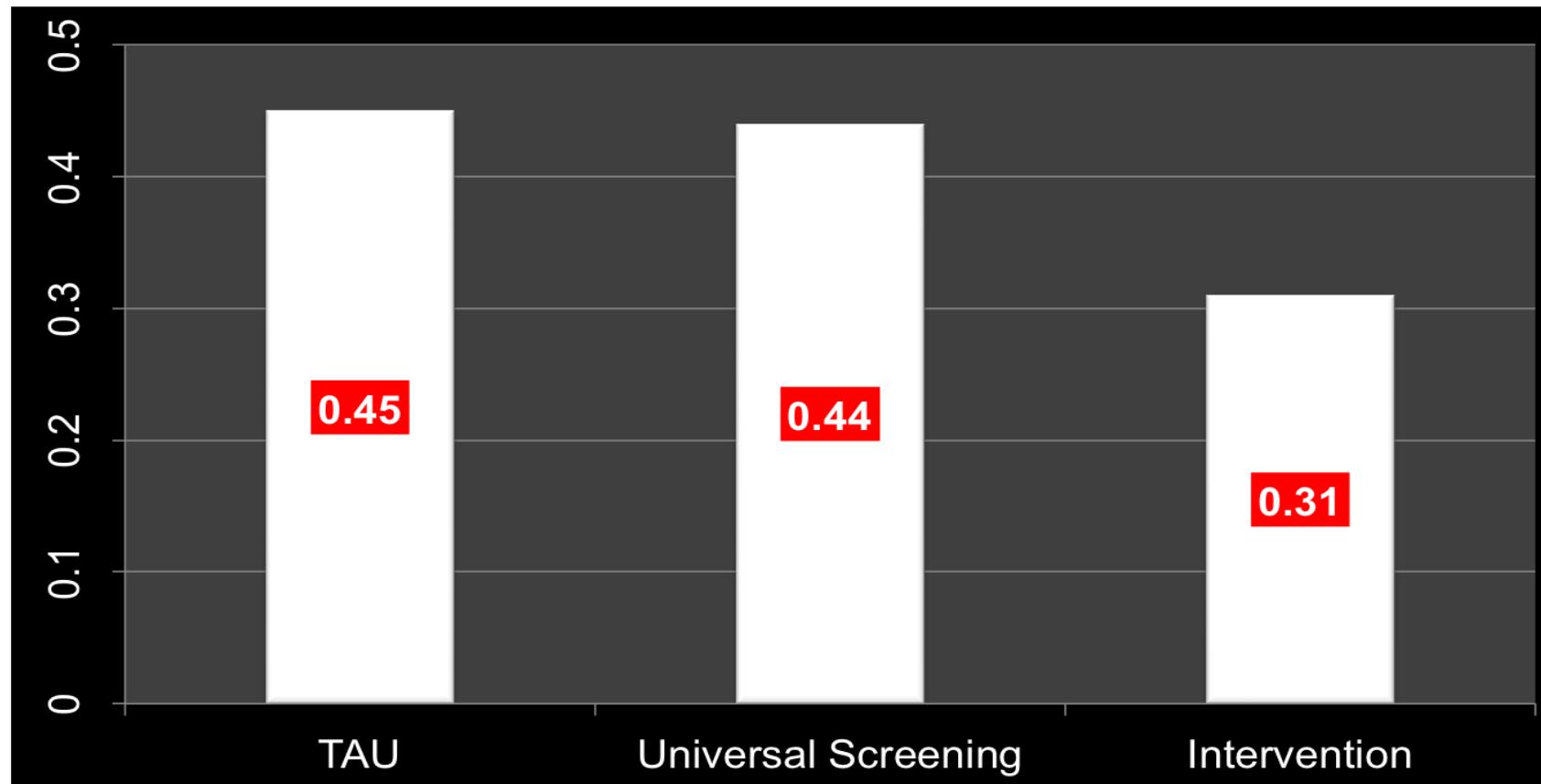


What do you want your life to be about?

VALUES	SHORT-TERM GOALS	DAILY ACTIONS
Your values & goals?	Things you want to achieve-short term?	Steps you will take to achieve goals

- Increase connection, support
- Help with problem-solving
- Help linkage to care

ED-SAFE Study: Total Suicide Attempts Per Participant



1376 ED patients with SI or SA, Three sequential phases of data collection

P < .05; Relative Risk Reduction – 31%: NNT = 7

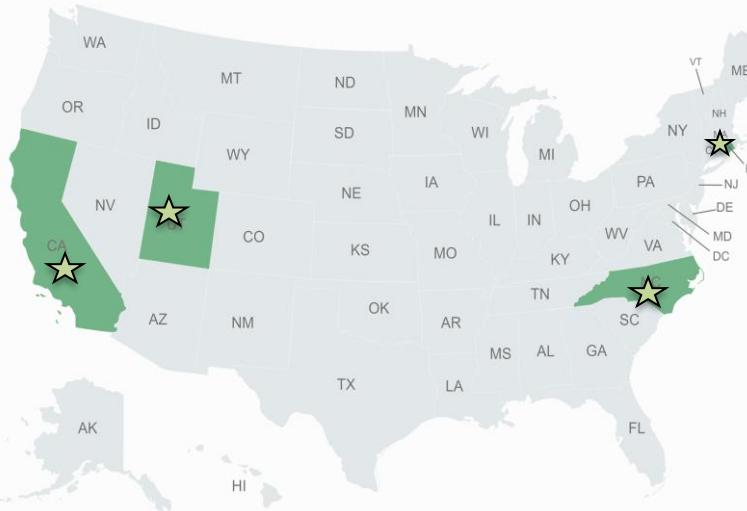
Miller IW, Camargo CA, Arias SA, et al. Suicide prevention in an emergency department population: The ED-safe study. *JAMA Psychiatry*. 2017;74(6):563-570.

NIMH UO1 MH088278

THANK YOU

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STAKEHOLDERS

- **Patient/Family**
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Taryn Hiatt
John Cooper
- **Clinicians/Decision
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Anthony Spirito & Ivan Miller, Brown University, RI

Brooks Keeshin & Lisa Giles, University of Utah, Intermountain Healthcare, UT

Rosa Elena Garcia, RAND Survey Research Group

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Additional Resources



- **Speaker Bios**
 - <https://www.pcori.org/sites/default/files/PCORI-Virtual-Briefing-Suicide-Prevention-Youth-Young-Adults-Speaker-Bios-022322.pdf>
- **PCORI-Funded Studies**
 - [Youth Partners in Care for Suicide Prevention](#)
 - [Comparing Two Ways to Provide Safety Planning Follow-Up Support for Adults and Teens at Risk of Suicide](#)
- **PCORI Suicide Prevention Topic Page**
 - [https://www.pcori.org/collection/suicide-prevention-highlights-pcori-funded-studies-and-projects](#)

Thank you!

Questions/Comments:
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