Suicide Risk Assessment and Response in Primary Care

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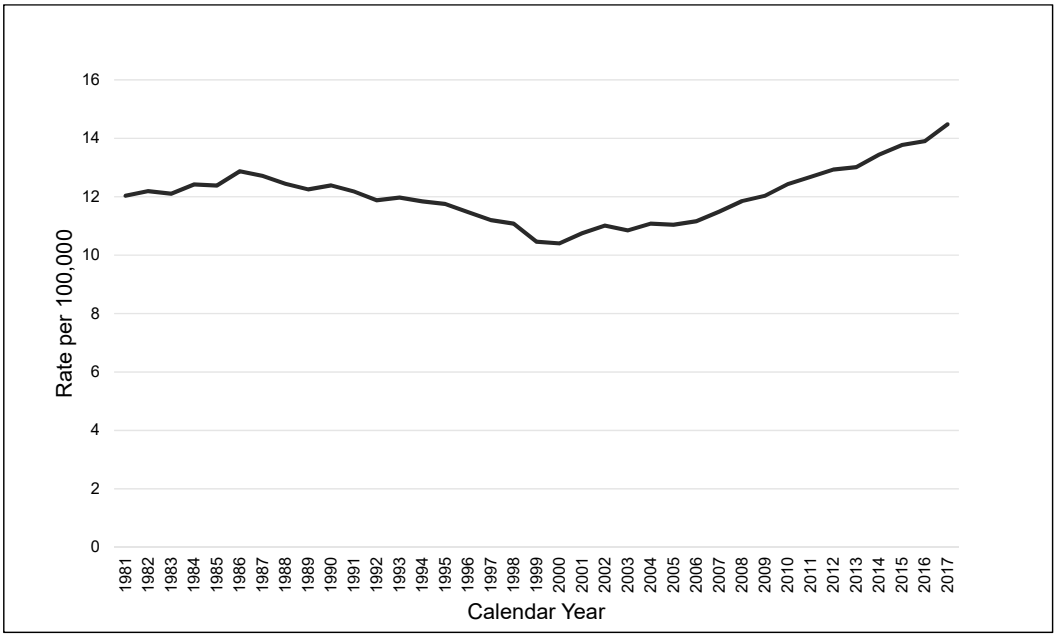


CDC, 2019

~50%

of suicide decedents
visit primary care during the months
immediately preceding their deaths

Stone et al. 2018; Luoma et al. 2002; Trofimovich et al. 2012

Over 50%

of suicide decedents
deny suicide ideation or do not mention suicidal thoughts
in the time leading up to their deaths

Bryan et al., 2016; Busch et al., 2003; Coombs et al., 1992; Hall et al., 1999; Kovacs et al., 1976

PHQ-2 Depression screening

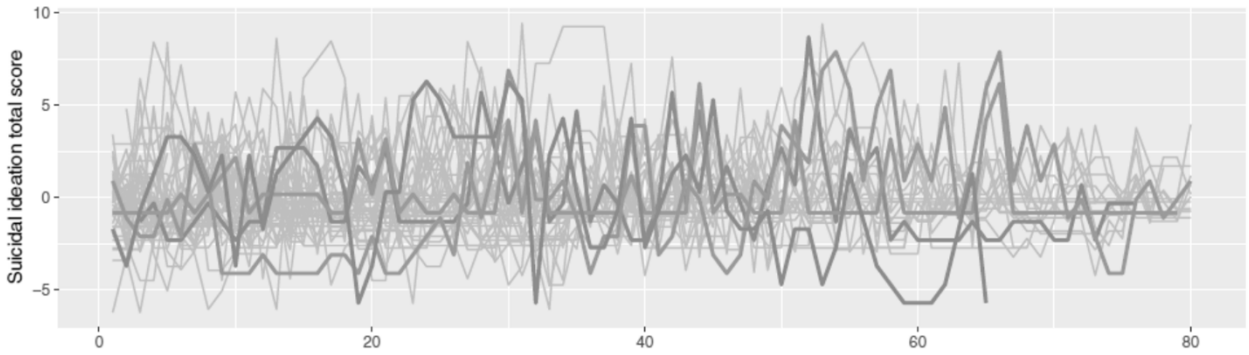
PHQ-9 Depression assessment

Suicide risk screening

Due to low incidence of suicidal behaviors among primary care patients, suicide risk screening in primary care leads to very high false positives

For each true positive on the PHQ-9, there are approximately 200 false positives

Louzon et al. 2016; Simon et al. 2013



Kleiman et al. 2017

PRImary care **S**creening **M**ethods **(PRISM)** Study

Multisite, prospective cohort study of 2744 primary care patients

All participants completed survey battery including PHQ-9 and SCS-R

Bryan et al. 2019

The world would be better off without me.
I can't stand this pain anymore.
I've never been successful at anything
I can't tolerate being this upset any longer.
I can never be forgiven for the mistakes I have made.
No one can help solve my problems.
It is unbearable when I get this upset.
I am completely unworthy of love.
Nothing can help solve my problems.
It is impossible to describe how badly I feel.
I can't cope with my problems any longer.
I can't imagine anyone being able to withstand this kind of pain.
There is nothing redeeming about me.
I don't deserve to live another moment.
I would rather die now than feel this unbearable pain.
No one is as loathsome as me.

13 (0.5%) patients had suicidal behavior within 30 days

28 (1.0%) patients had suicidal behavior within 90 days

Bryan et al. 2021

PHQ-9 Item 9 Response	1 Month (n=13) n	(%)	3 Months (n=28) n	(%)
Not At All	5	(38.5)	11	(39.3)
Several Days	4	(30.1)	8	(28.6)
More than half the days	1	(7.7)	3	(10.7)
Nearly every day	3	(23.1)	5	(17.9)
Missing	0	(0.0)	1	(3.6)

Bryan et al. 2021

	30 days	
	AUC	(95% CI)
The world would be better off without me.	0.730	(0.749, 0.964)
I can't stand this pain anymore.	0.674	(0.720, 0.932)
I've never been successful at anything	0.604	(0.636, 0.947)
I can't tolerate being this upset any longer.	0.741	(0.727, 0.952)
I can never be forgiven for the mistakes I have made.	0.644	(0.738, 0.973)
No one can help solve my problems.	0.651	(0.715, 0.946)
It is unbearable when I get this upset.	0.760	(0.739, 0.956)
I am completely unworthy of love.	0.740	(0.754, 0.980)
Nothing can help solve my problems.	0.667	(0.735, 0.948)
It is impossible to describe how badly I feel.	0.665	(0.721, 0.947)
I can't cope with my problems any longer.	0.729	(0.649, 0.970)
I can't imagine anyone being able to withstand this kind of pain.	0.773	(0.744, 0.964)
There is nothing redeeming about me.	0.707	(0.730, 0.956)
I don't deserve to live another moment.	0.771	(0.736, 0.988)
I would rather die now than feel this unbearable pain.	0.696	(0.716, 0.977)
No one is as loathsome as me.	0.748	(0.743, 0.977)

Bryan et al. 2021

Screening Results	**TP**	**FP**	**TN**	**FN**
30 days postbaseline				
PHQ-2 positive	9	468	2104	4
PHQ-2 positive + PHQ-9 positive	7	170	2402	6
PHQ-2 positive + PHQ-9 positive + SCS item 7 positive	7	114	2458	6
PHQ-2 positive + PHQ-9 positive + SCS item 12 positive	7	92	2480	6
PHQ-2 positive + PHQ-9 positive + SCS item 14 positive	5	68	2504	8
90 days postbaseline				
PHQ-2 positive	16	461	2098	10
PHQ-2 positive + PHQ-9 positive	13	164	2395	13
PHQ-2 positive + PHQ-9 positive + SCS item 7 positive	13	108	2451	13
PHQ-2 positive + PHQ-9 positive + SCS item 12 positive	12	87	2471	15
PHQ-2 positive + PHQ-9 positive + SCS item 14 positive	10	63	2494	17

Bryan et al. 2021

Screening Results	FP:TP	Sens	Spec	PPV	NPV
30 days postbaseline					
PHQ-2 positive	52.0	0.692	0.818	0.019	0.998
PHQ-2 positive + PHQ-9 positive	24.3	0.538	0.934	0.040	0.998
PHQ-2 positive + PHQ-9 positive + SCS item 7 positive	16.3	0.538	0.956	0.058	0.998
PHQ-2 positive + PHQ-9 positive + SCS item 12 positive	13.1	0.538	0.964	0.071	0.998
PHQ-2 positive + PHQ-9 positive + SCS item 14 positive	13.6	0.385	0.974	0.068	0.997
90 days postbaseline					
PHQ-2 positive	28.8	0.615	0.820	0.034	0.995
PHQ-2 positive + PHQ-9 positive	12.6	0.500	0.936	0.073	0.995
PHQ-2 positive + PHQ-9 positive + SCS item 7 positive	8.3	0.500	0.958	0.107	0.995
PHQ-2 positive + PHQ-9 positive + SCS item 12 positive	7.3	0.444	0.966	0.121	0.994
PHQ-2 positive + PHQ-9 positive + SCS item 14 positive	6.3	0.370	0.975	0.137	0.993

Bryan et al. 2021

Practice Implications

Thoughts about death or suicide ebb and flow, sometimes very quickly

Assessing suicide-specific negative thoughts in addition to suicidal ideation can improve the identification of suicidal patients

One or more items from the Suicide Cognitions Scale-Revised (SCS-R) can reduce false positives among primary care patients

Suicide Risk Assessment and Response in Primary Care

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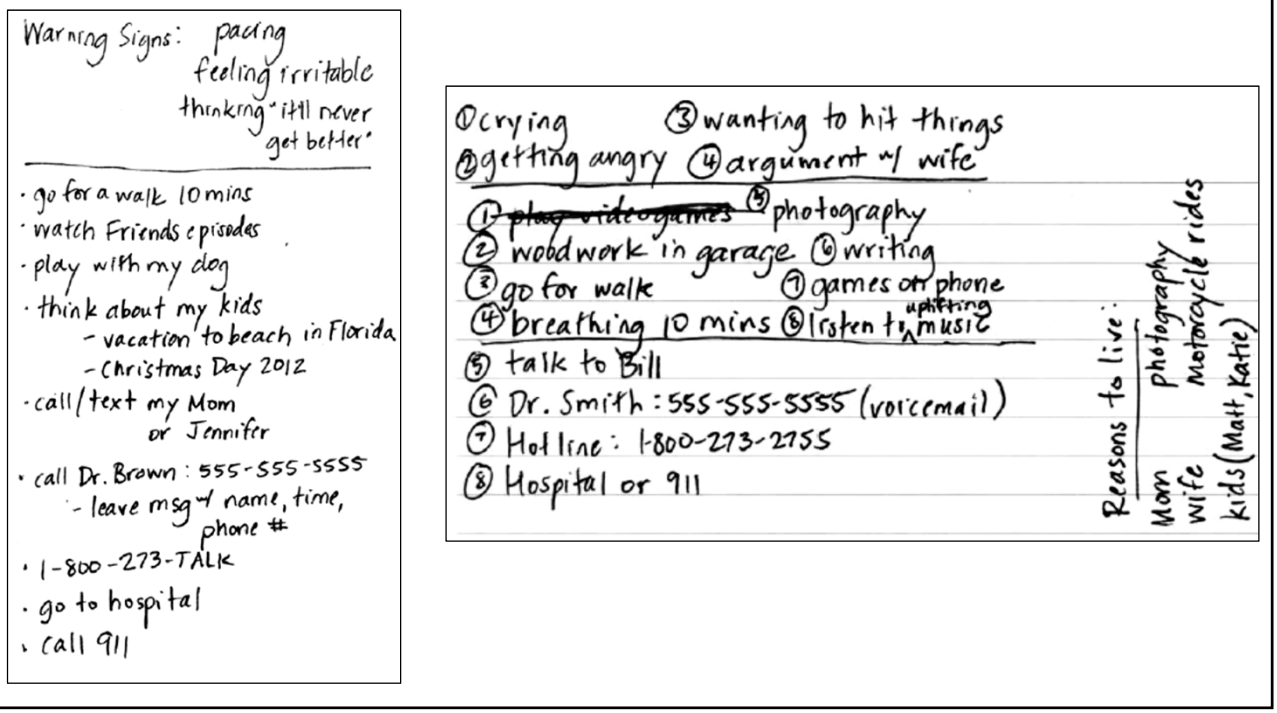


Warning Signs: pacing
feeling irritable
thinking "it'll never get better"

- go for a walk 10 mins
- watch Friends episodes
- play with my dog
- think about my kids
  - vacation to beach in Florida
  - Christmas Day 2012
- call/text my Mom or Jennifer
- call Dr. Brown: 555-555-5555
  - leave msg w/ name, time, phone #
- 1-800-273-TALK
- go to hospital
- call 911

① crying ③ wanting to hit things
② getting angry ④ argument w/ wife

① ~~play videogames~~ ⑤ photography
② woodwork in garage ⑥ writing
③ go for walk ⑦ games on phone
④ breathing 10 mins ⑧ listen to uplifting music
⑤ talk to Bill
⑥ Dr. Smith: 555-555-5555 (voicemail)
⑦ Hotline: 1-800-273-2755
⑧ Hospital or 911

Reasons to live:
Mom
wife
kids (Matt, Katie)
photography
Motorcycle rides

What a Crisis Response Plan Is

a memory aid to facilitate early identification of emotional crises

a checklist of personalized strategies to follow during emotional crises

a problem solving tool

a collaboratively-developed strategy for managing acute periods of risk

What a Crisis Response Plan Is Not

a no-suicide contract

a no-harm contract

a contract for safety

Essential Ingredients of Effective Interventions

1. Based on a simple, empirically-supported model
2. High fidelity by the clinician
3. Adherence by the patient
4. Emphasis on skills training
5. Prioritization of self-management
6. Easy access to crisis services

Rudd et al. (2009)

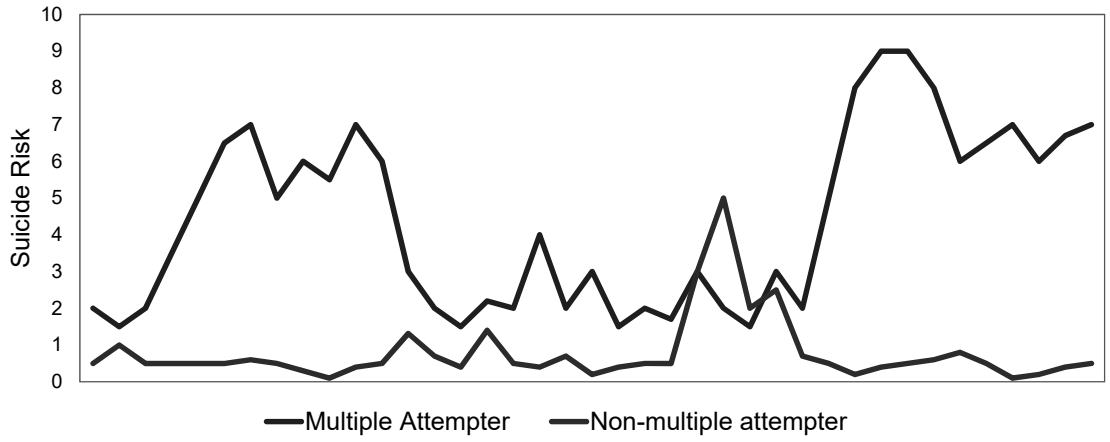
Understanding Suicidal Behaviors

Functional Model of Suicide

	Reinforcement	
	Positive	**Negative**
Automatic (Internal)	**Adding something desirable** ("To feel something, even if it is pain")	**Reducing tension or negative affect** ("To stop bad feelings")
Social (External)	**Gaining something from others** ("To get attention or let others know how I feel")	**Escape interpersonal task demands** ("To avoid punishment from others or avoid doing something undesirable")

(Bryan, Rudd, & Wertenberger, 2012; Nock & Prinstein, 2004)

Stable and Dynamic Aspects of Suicide Risk



(Bryan & Rudd, 2016)

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Crisis Response Planning: Mechanics

Narrative Assessment

Ask patient to describe the chronology of events for the suicidal episode that led up to the crisis

- "Let's talk about your suicide attempt/what's been going on lately."
- "Can you tell me the story of what happened?"

Assess events, thoughts, emotions, physical sensations, and behaviors

- "What happened next?"
- "And then what happened?"
- "What were you saying to yourself at that point?"
- "Did you notice any sensations in your body at that point?"

Remain focused on the index suicidal episode

Crisis Response Plan

1. Explain rationale for CRP
2. Provide card for patient to record CRP

3. Identify personal warning signs
4. Identify self-management strategies
5. Identify reasons for living
6. Identify social supports
7. Provide crisis / emergency steps

8. Verbally review and rate likelihood of use

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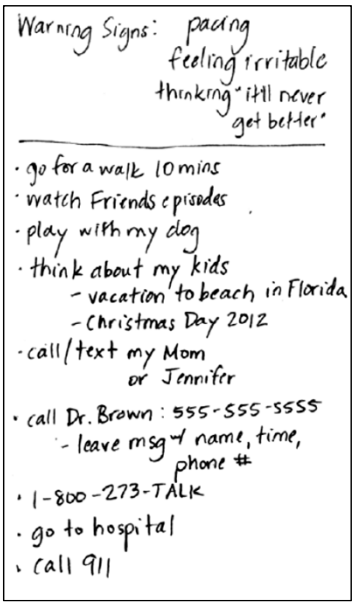
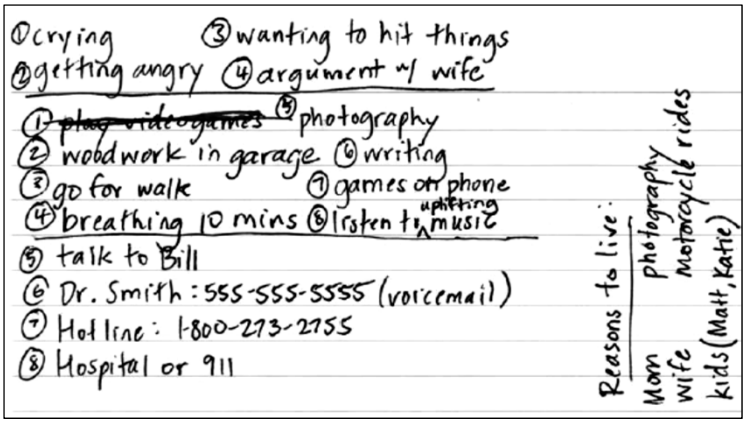
Sample Crisis Response Plans





CRP Research

- **<u>Reduces suicide attempts by 76%</u>** as compared to treatment as usual (Bryan et al., 2017a)
- Significantly increases positive emotions and optimism when reasons for living are included (Bryan et al., 2017b; Rozek et al., 2018)
- Increases recall of self-management, reasons for living, and social support; recall of these elements associated with **<u>significantly reduced risk</u>** (Bryan et al., 2018)
- More frequent use of CRP with reasons for living associated with greater reductions in risk (Bryan et al., 2018)

Tips for Effective Crisis Response Planning

- Ask patients to generate ideas by asking what has worked in the past
- Use index cards or business cards, not sheets of paper
- Handwrite the plan, do not "fill in the blanks" with pre-printed paper
- Take a picture of the card to keep in their smart phone

Thank you!

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