Status of Department of Defense Funded Suicide Research

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Post Admission Cognitive Therapy (PACT) for the Prevention of Suicide

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UNIFORMED SERVICES UNIVERSITY
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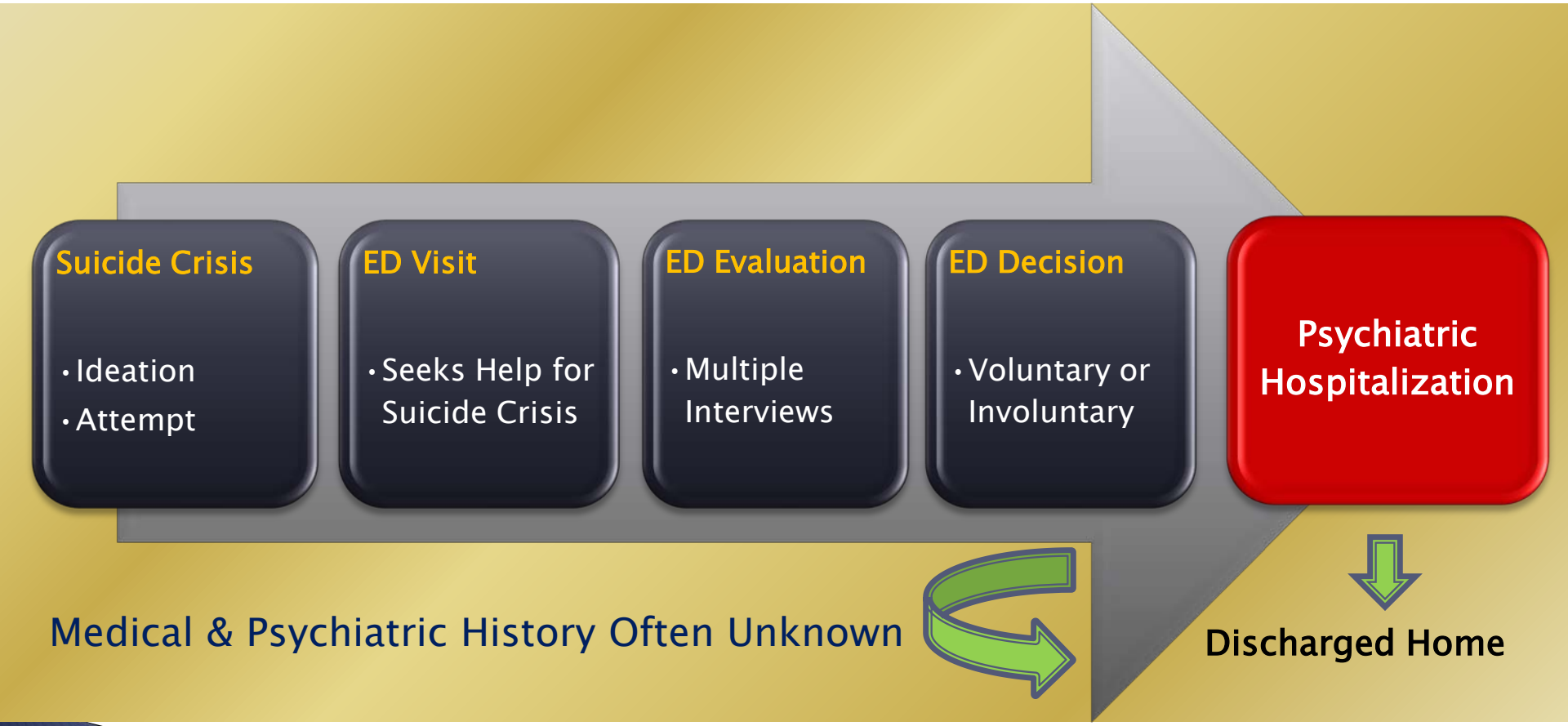
Presentation Outline

- Suicide Related Emergency Department Visits and Psychiatric Hospitalizations
- Limited Scientific Evidence for Acute Care
- Post Admission Cognitive Therapy (PACT)
- Brief Summary

Emergency Department Visits
Psychiatric Hospitalizations

Path of Suicidal Patient to Psychiatric Hospitalization



U.S. Hospital Stays

- 1 in 5 Hospital Admissions
  - Related to Mental Health Condition
- Average Length of Psychiatric Stay = 8.2 Days
  - All Hospital Stays = 4.6 Days
- Two Most Common Causes for Psychiatric Stays
  - Mood Disorders = 729,500 Stays (54%)
  - Psychotic Disorders = 380,600 Stays (28%)

Source: AHRQ, Healthcare Cost and Utilization Project, 2008

Psychiatric Hospitalizations
Suicide Attempts

- Of the adults who attempted suicide in the past year, 62.3% received medical attention for their suicide attempts.

- 46.0% stayed overnight or longer in a hospital for their suicide attempts.

Source: National Survey on Drug Use and Health, 2009

Reasons for Hospitalizations

Table 1. Hospitalizations, ICD-9 diagnostic categories, active component, U.S. Armed Forces, 2005, 2007, and 2009

	2005			2007			2009		
Major diagnostic category (ICD-9-CM)	No.	Rate[a]	Rank	No.	Rate[a]	Rank	No.	Rate[a]	Rank
Mental disorders (290 - 319)	11,335	8.01	(3)	13,703	9.78	(2)	17,538	12.13	(1)
Pregnancy and childbirth (630 - 679, relevant V codes)[b]	18,465	13.04 (*89.78*)	(1)	18,201	12.99 (*90.80*)	(1)	17,354	12.01 (*84.46*)	(2)
Injury and poisoning (800 - 999)	12,358	8.73	(2)	12,531	8.95	(3)	11,156	7.72	(3)
Digestive system (520 - 579)	7,332	5.18	(4)	7,373	5.26	(5)	7,676	5.31	(4)
Musculoskeletal system (710 - 739)	7,322	5.17	(5)	7,534	5.38	(4)	7,516	5.20	(5)

Source: Medical Surveillance Monthly Report, April 2010

Brief Summary

- Suicidal individuals receiving inpatient psychiatric care are at an increased risk for suicide-related behaviors or eventual death by suicide.
  - This risk may last for many years.
- There is an emotional and economic burden associated with suicide-related psychiatric hospitalizations.
- Mental disorders have become the leading cause for hospitalizations in the U.S. military.
  - Mental Disorders = Suicide Risk, Homicide Risk, AND/OR Psychosis

Limited Scientific Evidence
Acute Care

Inpatient Psychotherapy RCTs

- **Study 1 (Liberman et al., 1981)**
  - 24 Patients Randomized, 2 Yr Follow-up
    Behavior Therapy (n = 12); Insight Oriented Therapy (n = 12)
  - 4 Daily Hours of Therapy over 8 Days
  - Outcomes: Depression, Suicide Ideation, & Attempts
  - BT > IOT at 9 Months

- **Study 2 (Patsiokas, 1985)**
  - 15 Patients Randomized, No Follow-up
    Problem Solving (n = 5); Cognitive Restructuring (n = 5); Non-Directive Control (n = 5)
  - 10 Individual Sessions over 3 Weeks
  - Outcomes: Hopelessness, Suicide Ideation, & Intent
  - PS > CR = Control

Commonalities of Treatments
Weinberg et al. (2010)

1970 to 2007 Randomized Controlled Trials on Psychotherapy to Address Suicide-Related Behaviors

- Dialectical Behavior Therapy (DBT)
- Mentalization Based Treatment (MBT)
- Transference-Focused Psychotherapy (TFP)
- Schema-Focused Therapy (SFT)
- Cognitive Behavior Therapy (CBT)

Commonalities of Treatments
Weinberg et al. (2010)

Agreed Upon Treatment Framework	Attention to Affect	Active Therapist
Suicide Must Be Understood Exploration OR Behavioral Analysis	Change in Thinking & Behavior	Agreed Upon Strategy for Managing Suicidal Crises

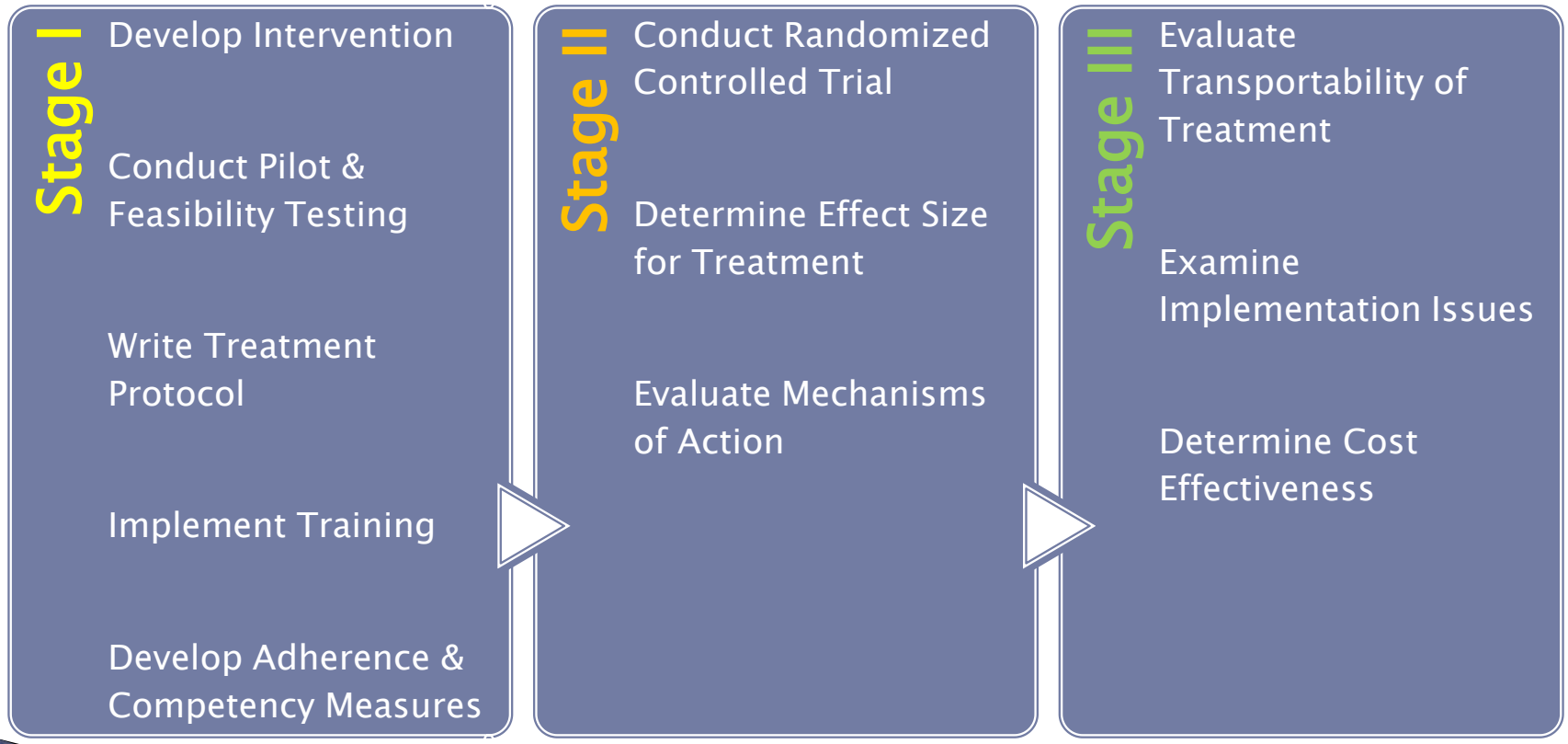
Post Admission Cognitive Therapy (PACT)

Inpatient Cognitive and Behavioral Treatment for the Prevention of Suicide

Ghahramanlou-Holloway, Cox, & Greene

Cognitive and Behavioral Practice, 2012

Stages of Treatment Development Research

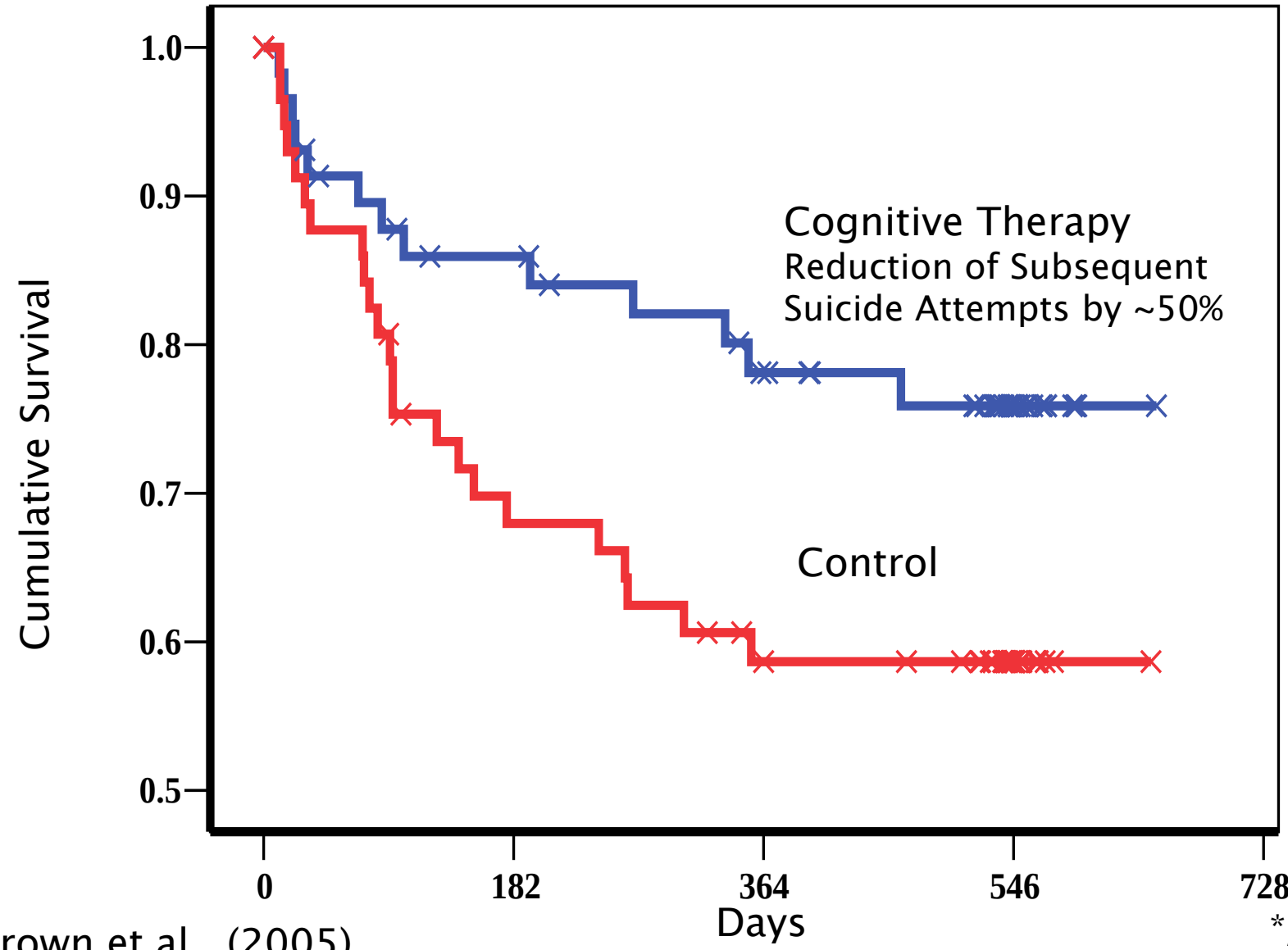


Rounsaville et al., 2001

	Trial 1 Stage I	Trial 2 Stage I	Trial 3 Stage II	Trial 4 Stage II Stage III
Number of Expected Participants	N = 24	N = 50	N = 218	N = 189
Funding Source and Amount	National Alliance for Research on Schizophrenia and Depression $60,000	Congressionally Directed Medical Research Program $457,609	United States Department of Defense $6,000,000	United States Department of Defense $2,893,708
Inclusion Criteria	Inpatients Suicide Attempt	Inpatients Suicide Attempt AND Trauma	Inpatients Suicide Attempt Past OR Current	Inpatients Suicide Attempt OR Suicide Ideation
Intervention	Post Admission Cognitive Therapy (PACT)	Post Admission Cognitive Therapy (PACT)	Post Admission Cognitive Therapy (PACT)	Safety Planning
Sites	Walter Reed National Military Medical Center To Be Added: Ft. Belvoir; Naval Medical Center Portsmouth			

10-Session Outpatient Cognitive Therapy for the Prevention of Suicide

Survival Functions for Repeat Suicide Attempt by Study Condition



Brown et al., (2005)

*$p < .05$

Cognitive Therapy for Prevention of Suicide

SUICIDE-RELATED BEHAVIORS

Problematic Coping

Primary Problem Rather than Symptom of a Disorder

Study Participants

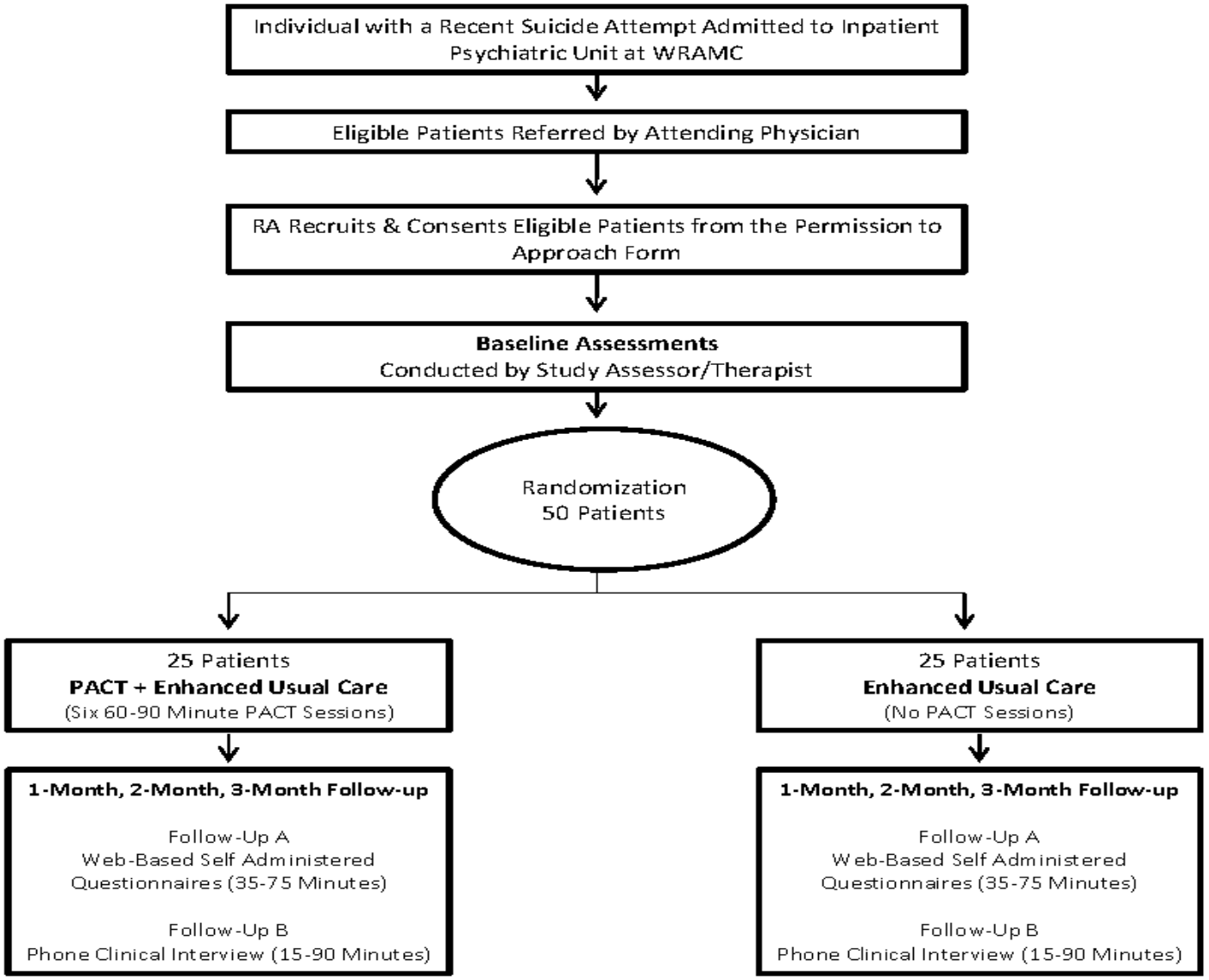
- **Inclusion Criteria**
  - **Suicide Attempt** within Past 10 Days
  - **Current or Past Diagnosis of ASD or PTSD**
  - Baseline Completed within 48 Hours of Admission
  - Over the Age of 18
  - Provides Informed Consent

- **Exclusion Criteria**
  - Self-Inflicted Harm with No Intent or Desire to Die
  - Medical Incapacity to Participate
  - Current State of Active Psychosis
  - Expected Discharge within 72 Hours of Admission

Suicide Attempt Definition
Simplified!

Posner et al., 2006

Figure 1. Flow of Participants in the Pilot Trial for *Post Admission Cognitive Therapy* (PACT)



	Baseline	1 Mo. Follow-up	2 Mo. Follow-up	3 Mo. Follow-up
Alcohol Use Disorders Identification Test (AUDIT)	X	X		X
Barratt Impulsivity Scale (BIS)	X			X
Beck Anxiety Inventory (BAI)	X			X
Beck Depression Inventory-II (BDI-II)	X	X	X	X
Beck Hopelessness Scale (BHS)	X	X	X	X
Beck Scale for Suicide Ideation (BSS)	X	X	X	X
Clinician Assessment of PTSD Scale (CAPS)	X			X
Columbia Suicide Severity Rating Scale (C-SSRS)	X	X	X	X
Deployment Risk and Resilience Inventory (DRRI)	X			
Difficulties in Emotion Regulation Scale (DERS)	X			X
Firestone Assessment of Suicide Intent (FASI)	X			X
Lethality Scale (LS)	X	X	X	X
Locator/Demographics Form	X			
McGill Pain Questionnaire	X	X		X
Medical History Form – Chart	X			
Medical History Form / Psychiatric History Form	X			
Mental Health Utilization Form	X	X	X	X
Mini International Neuropsychiatric Screen & Interview (MINI)	X			
Pittsburgh Sleep Quality Index (with PTSD Addendum)	X	X		X
Positive Affect Negative Affect Schedule – Extended Form (PANAS-X)	X			
PTSD Checklist Military or Civilian Version (PCL)	X	X		X
Reasons for Living - Reasons for Dying (RFL-RFD)	X	X		X
Scale for Suicide Ideation (SSI)	X	X	X	X
Social Problem-Solving Inventory-Revised, Long Form (SPSI)	X			X

PACT

6 Individual Therapy Sessions – 90 Min Each

Sessions Transcribed

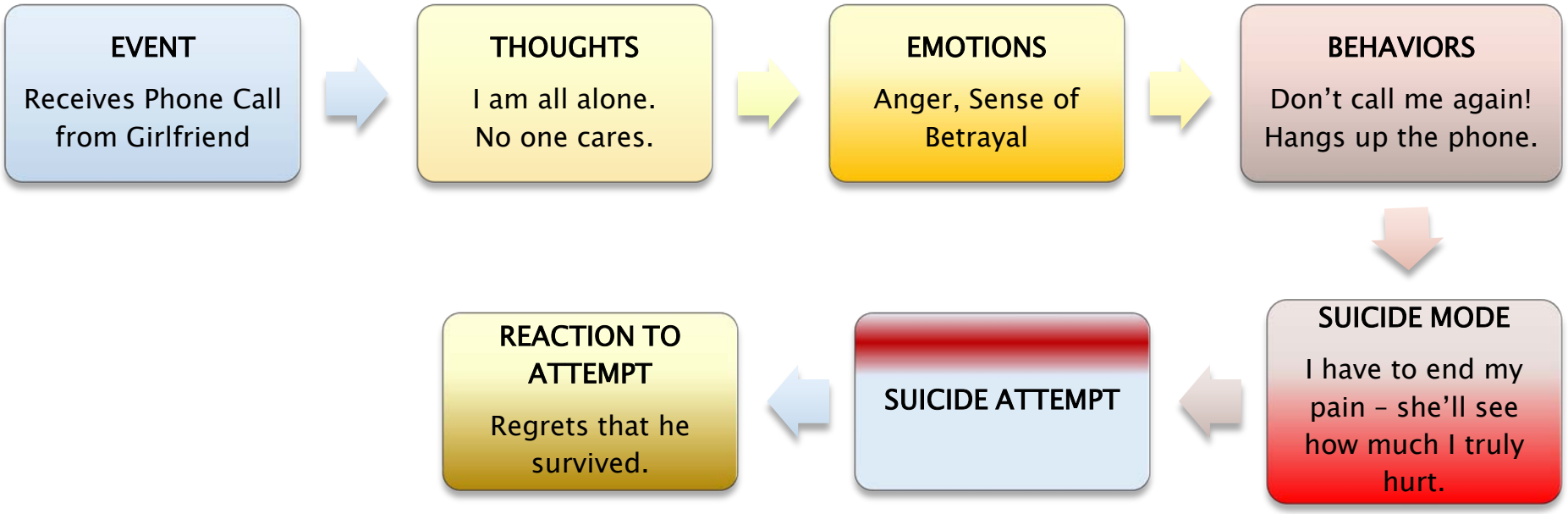
Treatment Phase	Therapeutic Goals
Phase I Sessions 1 and 2	❑ Build Therapeutic Alliance ❑ Provide Psychoeducation ❑ Collaboratively Plan for Safety ❑ Develop Suicide Mode Conceptualization ❑ Assess Readiness for Change
Phase II Sessions 3 and 4	❑ Instill Hope – Increase Reasons for Living ❑ Teach Adaptive Coping Strategies ❑ Target Deficits in Problem Solving ❑ Address Social Support Concerns ❑ Practice Emotion Regulation Skills
Phase III Sessions 5 and 6	❑ Promote Linkage to Outpatient Aftercare ❑ Teach Relapse Prevention Strategies ❑ Refine Safety Plan before Discharge

Patient's Story

On Decision to Attempt Suicide

I went to the medicine cabinet and I looked in the medicine cabinet and I took all the narcotics out that I could find…I laid them all on the bed. And I sat there for a couple of minutes and I was thinking, like, it was like a part of me saying, "you don't want to do this." And there was a part of me saying, "Do it. Just do it. Do it." And a part of me saying "oh/no?". And it was 3:36 and I was looking at the clock and was just thinking about it – back and forth, back and forth. And 3:40…I was just to do it. And I just grabbed them all and took 'em. And I laid there. I laid in the bed. I started crying. And, I don't know why I picked up the phone and I called my brother. I didn't tell him what I did or what was going on, I just called him. And we talked for maybe about a minute or two and hung up the phone. Just waiting. Waiting for the effects to take - for whatever was supposed to happen.

Timeline of Suicide Attempt



Take Home Lessons

- The treatment needs of suicidal individuals have been historically neglected.
- We need to develop **evidence-informed interventions** for suicidal individuals admitted for inpatient care.
- We need to develop these interventions **as soon as possible** to address the unique needs of this highly vulnerable group.

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Questions?