

2011 Military Health System Conference

Research Advances in Building Resilience in Psychological Health, Suicide Prevention, and Effects of Deployments on Family Members

The Quadruple Aim: Learning & Growth, Readiness, Experience of Care

COL Carl Castro



Military Operational Medicine Research Program

Report Documentation Page

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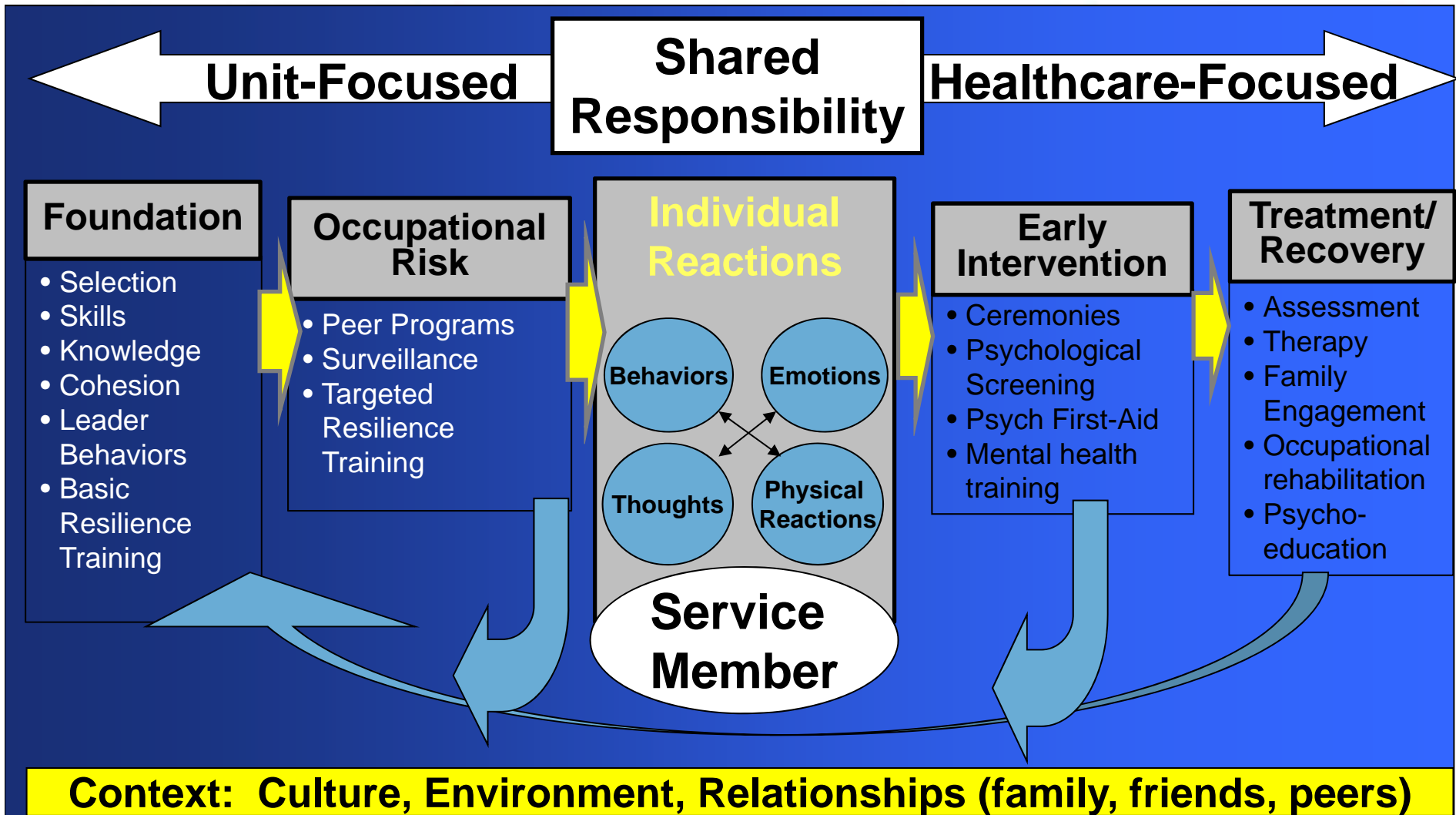
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Problems/Threats



- Completed Soldier suicide rates have risen
- High op-tempo and multiple deployment demands
- Military families face unique life challenges
- Behavioral health problems
- Alcohol/substance abuse & risky behaviors
- Environmental and situational strains
- Measures of resilience are not well-established and have not been validated in military populations

Military Occupational Mental Health Model



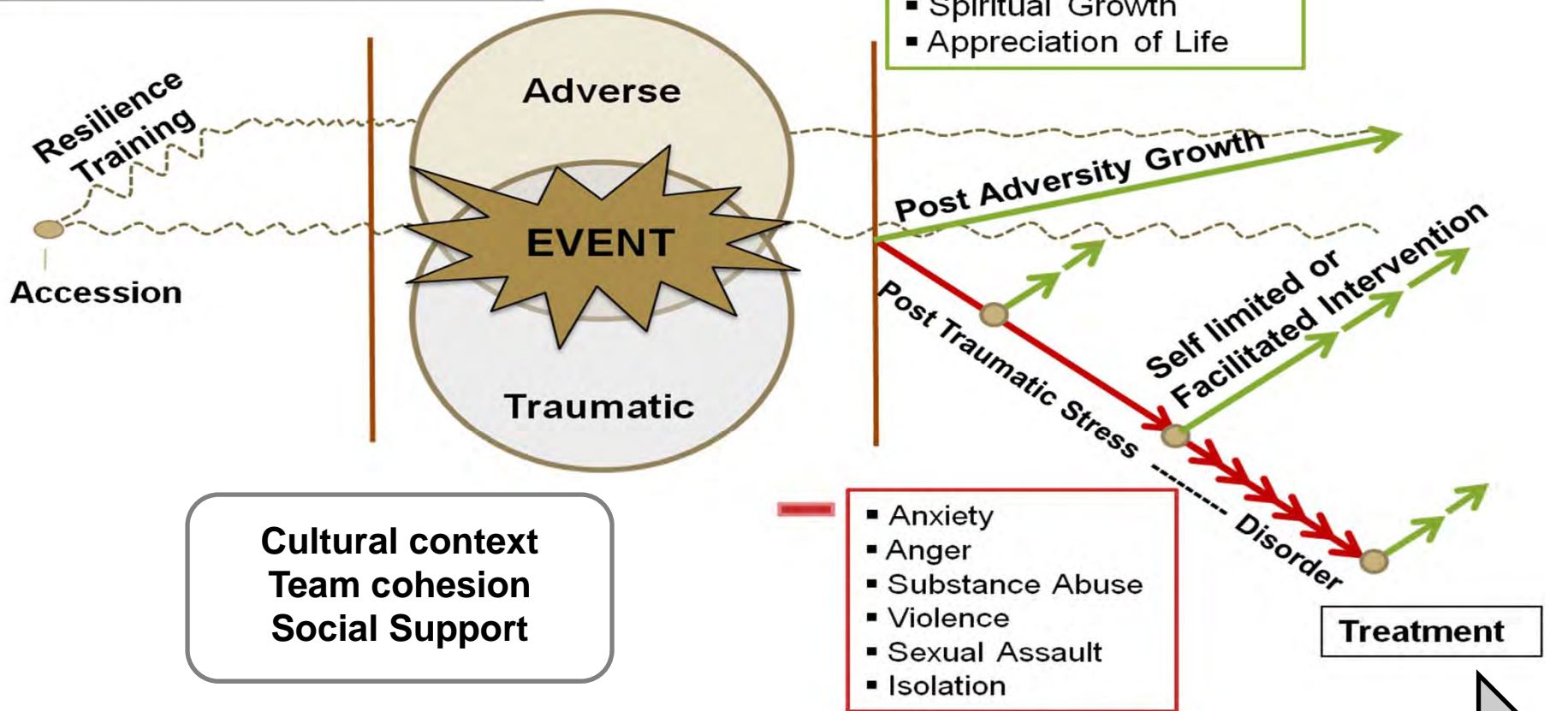
Source: The Technical Cooperation Panel 13

Comprehensive Soldier Fitness Model of Resilience



COMPREHENSIVE SOLDIER FITNESS
STRONG MINDS ★ STRONG BODIES

- +**
- Self Confidence
 - Enhanced Leadership
 - Personal Strength
 - Spiritual Growth
 - Appreciation of Life



Mindfulness-Based Military Training in Army Infantry Platoons



Amishi Jha, PhD

University of Pennsylvania

\$1,000,000

Period of Performance: 48 months

Awarded: Feb 09

MILESTONES	Months	0-12	13-24	25-36	37-48
Coordinate & deliver pre-deployment psychological health programs					
Data collection and analysis of pre-deployment programs (MMFT and PP) and no intervention control					
Analyze data and disseminate results					

Aims

- Compare & contrast efficacy of a 16-hour version of Mindfulness-based Mind Fitness Training (MMFT) to a 16-hour active (control) comparison intervention, focused on the tenets of positive psychology (PP) to examine mechanisms of action
- Recruit 3 US Army infantry platoons to participate, including a no-intervention control group

2011 MHS Conference

Approach

- A 4-year study of 120 Soldiers, 3 US Army infantry platoons of 40 Soldiers
- The 3 organic platoons will be matched and subjects will be tested pre- and post-training and post-deployment

Deliverables

- Knowledge that will guide best practices for noninvasive, long-term intervention methods to promote psychological resilience in military personnel

Optimizing Delivery of Mindfulness Based Military Training



Amishi Jha, PhD
University of Pennsylvania
\$1,000,000
Period of Performance: 36 months
Awarded: Mar 09

MILESTONES	Months	0-12	13-24	25-36
Intervention planning & approval		█		
Data collection & analyses			█	
Analyze data and synthesize results				█
Disseminate results				█

Aims

- Compare & contrast 3 delivery vehicles of military Mindfulness-based Mind Fitness Training (MMFT) & determine components most critical for improving neural, cognitive, and affective functioning
- M24 (mindfulness training + didactic material about military application, stress, trauma and resilience)
- M8-D (didactic content)
- M8-MT (mindfulness skills, 24 or 8 hours)

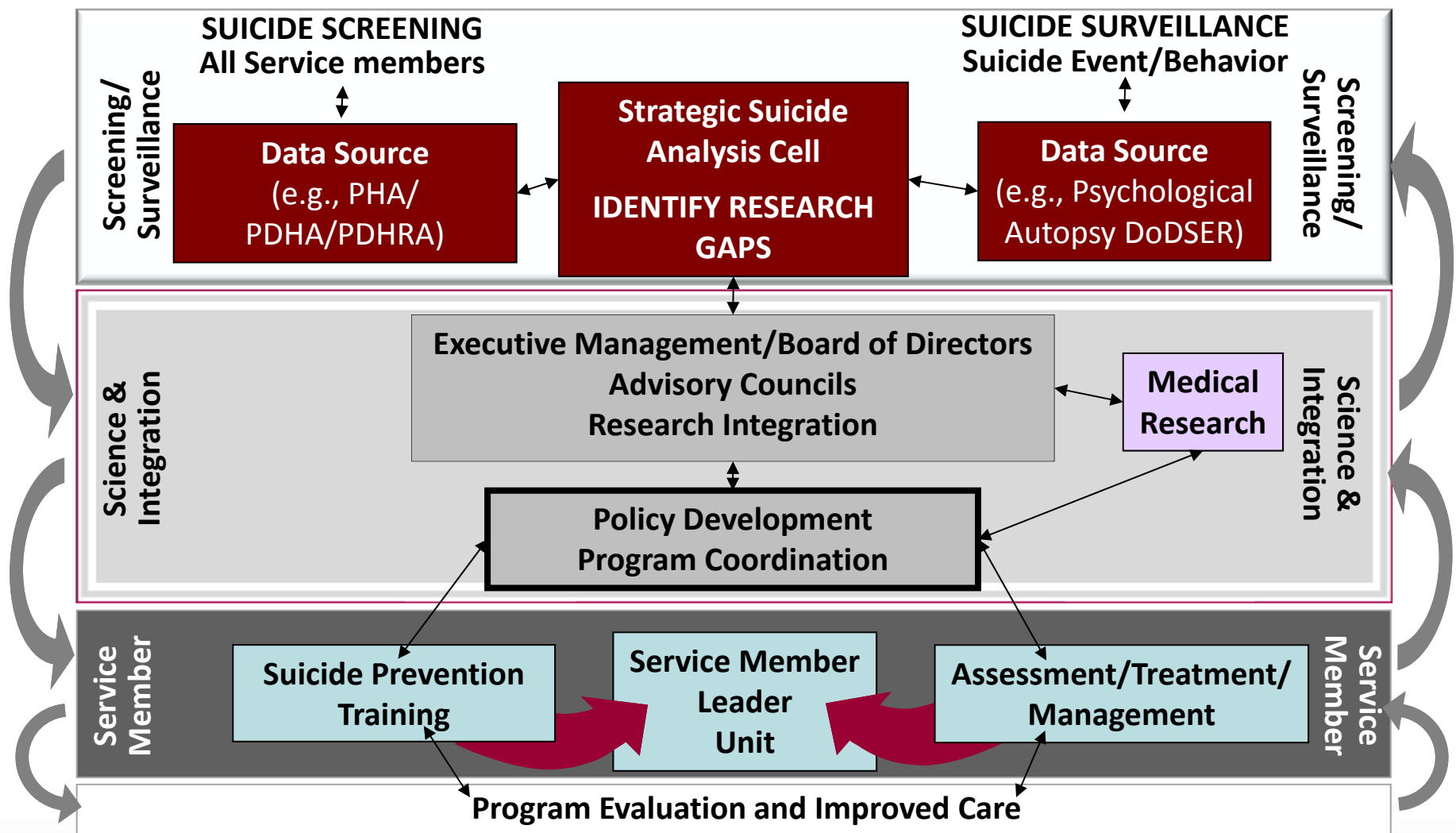
Approach

- 3-year study of US Army infantry platoons, comparing and contrasting the efficacy of three delivery vehicles of MMFT

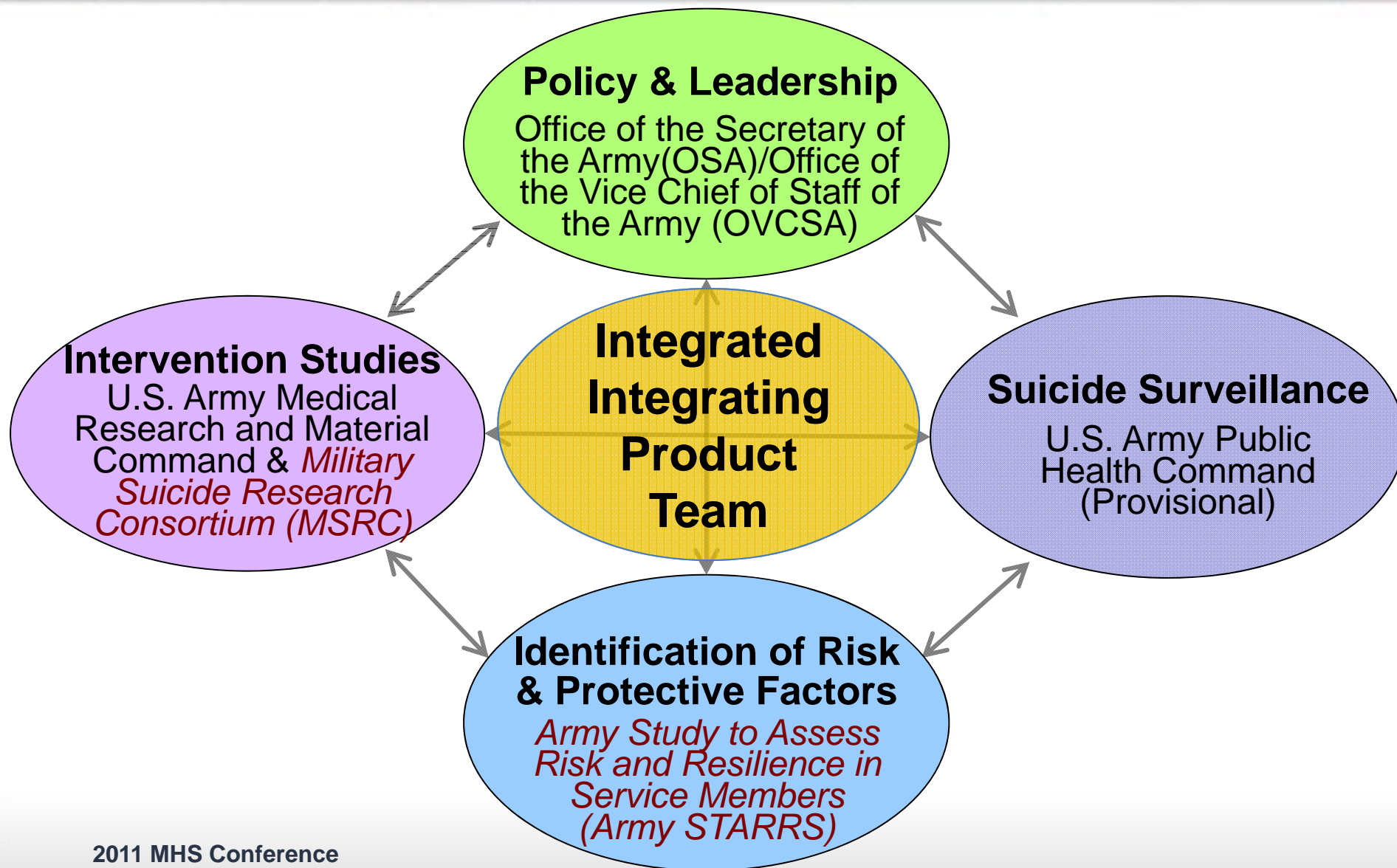
Deliverables

- Knowledge informing best practices for noninvasive, long-term intervention methods to promote psychological resilience in military personnel

Evidence-Based Military Public Health Suicide Prevention Model



Military Suicide Research Integration and Coordination



MRMC Suicide Research Projects (\$79M)

Principal Investigator	Organization	Proposal Title	Award
Bob Ursano, MD	USUHS	Army Study to Assess Risk and Resilience in Service Members (Army STARRS)	\$50,000,000 60 months
Mark Reger, PhD	Madigan Army Medical Center	The Association between Suicide and OEF/OIF Deployment History	\$1,961,003 36 months
Marianne Goodman, PhD	James J Peters VAMC	High Risk Suicidal Behavior in Veterans- Assessment of Predictors and Efficacy of Dialectical Behavior Therapy	\$1,279,912 36 months
Toby Cooper, BCPS	Darnell Army Medical Center	Drug Related Overdoses Among Military Personnel	\$282,040 18 months
Marjan Holloway, PhD	USUHS	A Brief Intervention to Reduce Suicide Risk in Military Service Members and Veterans	\$2,666,717 36 months
Marjan Holloway, Ph.D.	USUHS	Pilot Trial of Inpatient Cognitive Therapy for the Prevention of Suicide in Military Personnel With Acute Stress Disorder or PTSD	\$442,000 48 months
Charles Hoge, MD	Walter Reed Army Institute of Research	Suicidal Ideation in the Combat Environment	\$65,000 24 months
Thomas Joiner, PhD	Florida State University (FSU)	Optimizing Screening and Risk Assessment for Suicide Risk in the U.S. Military	\$753,159 36 months
Tyler Smith, PhD	Naval Health Research Center	Mental Health Symptoms as a Determinant for Suicide Attempt and Completion	\$100,000 12 months
Matthew Miller, MD	Harvard College	Antidepressants and the Risk of Self-harm and Unintentional Injury Among Younger Veterans	\$656,184 24 months
David Rudd, PhD	Texas Tech University	Brief Cognitive Behavioral Therapy for Military Populations	\$1,967,035 36 months
Peter Gutierrez, PhD	Denver VAMC	Blister Packaging Medication to Increase Treatment Adherence and Clinical Response: Impact on Suicide-related Morbidity & Mortality	\$1,173,408 36 months
Thomas Joiner, PhD & Peter Gutierrez, PhD	FSU & Denver VAMC	Military Suicide Research Consortium	\$17,000,000 60 months

A Brief Intervention to Reduce Suicide Risk in Military Service Members and Veterans



Marjan Holloway, PhD

**Uniformed Services University of
the Health Sciences**

\$2,666,717

Period of Performance: 36 months

Awarded: Sep 09

MILESTONES	Months	0-12	13-24	25-36
Adapt and examine feasibility of SAFE-MIL				
Conduct RCT				
Data analyses				
Disseminate study findings				

Aims

- Evaluate written safety planning intervention efficacy on suicide ideation, related coping, and help seeking attitudes for hospitalized military personnel at high suicide risk
- Evaluate effectiveness of safety planning intervention on suicide attempts, ideation, attendance of outpatient mental health and substance abuse interventions, and suicide-related coping for Veterans at high suicide risk in emergency department (ED) settings

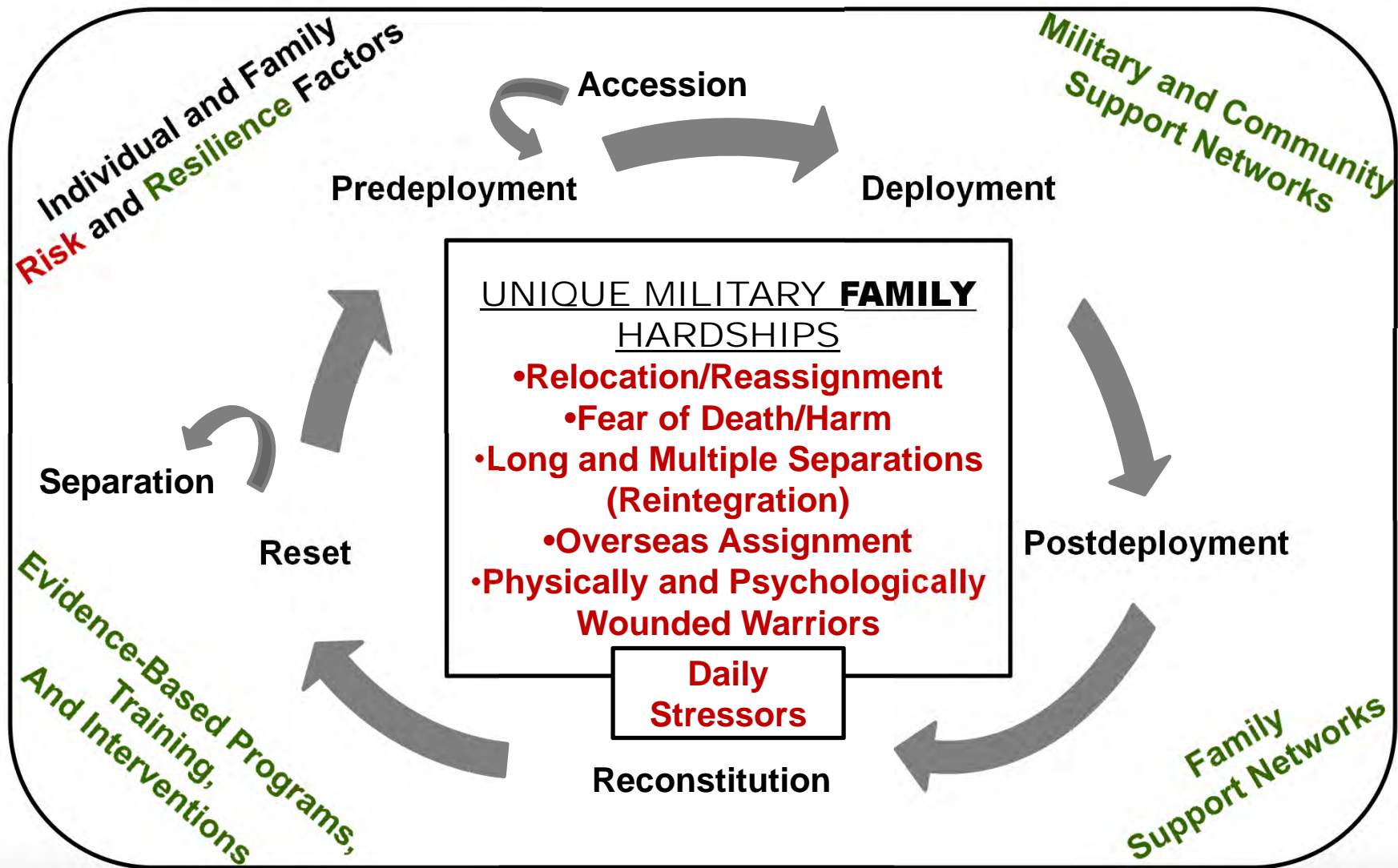
Approach

- Two separate but related projects will compare the study interventions with enhanced usual care conditions on suicide-related outcomes. Project 1 is a RCT, Project 2 is a quasi-experimental design

Deliverables

- Knowledge about efficacy of safety planning in reducing suicide ideation, related coping, and negative attitudes toward help seeking

Framework for Military Family Research



Reintegration: The Role of Spouse READI Telephone Support Groups



Linda Nichols, PhD
VAMC, Memphis

\$1,073,000

Period of Performance: 48 months

Awarded: Sep 09

MILESTONES	Months	0-12	13-24	25-36	37-48
IRB approval		█			
Hire & train personnel		█			
Recruitment		████████████████████			
Intervention & data collection		██			
Data entry/cleaning		██			
Analyze results				████████████████████	
Dissemination of results				████████████████████	

Aims

- Develop post-deployment spouse Resilience Education and Deployment Information (READI) (formerly spouse Battlemind) telephone support groups to enhance spouse and service member resilience
- Determine participant satisfaction, adherence to therapeutic recommendations, and changes in spouse mental health with spouse telephone resilience training
- Incorporate lessons learned from pilot work

Approach

- A randomized controlled trial of spouse READI; train telephone groups for 14 sessions over 7 months in resilience training, education groups, or usual care
- Outcome measures of depression, anxiety, Family functioning, and participant satisfaction at baseline, 7, and 12 months

Deliverables

- Manualized intervention to help spouses & facilitate reintegration of the returning Soldier

Summary/Conclusion



- All medical research conducted within DoD is threat based
- Research efforts are funded to support a research strategy, which is designed to solve the problems identified in the threat analysis
- Funded research is actively managed to ensure accountability, to maintain awareness of findings, and to ensure integration with other efforts
- Identified solutions are rapidly translated to the field.