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Severity of Combat Exposure, Psychological Symptoms, Social Support and Suicide Risk in OEF/OIF Veterans

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Abstract

Objective: The current study explored the relationship between severity of combat exposure, psychological symptoms, and suicide risk in a national sample of OEF/OIF veterans.

Method: The National Center for Veterans Studies (NCVS) survey (34-item total, with multiple questions for some items) was completed by 252 OEF/OIF combat experienced veterans (218 male and 34 female). The survey took about 15-20 minutes on average to complete and included basic demographic information, several questions targeting available social support, along with a range of clinical instruments

Results: Combat exposure was found to be positively related to the severity of psychological symptoms and self-appraised suicide risk, with those reporting “heavy” combat experience having significantly greater symptoms across all domains (general anxiety, depression, post-trauma symptoms and sleep disturbance) and elevated suicide risk. In addition, 93% of those reporting “heavy” combat exposure exceeded the recommended PCL-M cutoff for diagnosis of PTSD in OEF/OIF veterans. Severity of combat exposure did not provide additional predictive power for suicide risk beyond that attributed to post-trauma symptoms (PCL-M). Post-trauma symptoms (PCL-M) were found to moderate the relationship between depression and self-appraised suicide risk. Social support was found to moderate the relationship between psychological symptoms (general anxiety, depression, post-trauma symptoms and sleep disturbance) and suicide risk.

Conclusions: Current findings suggest the possibility of two different pathways to suicide for military personnel, with a distinct clinical trajectory involving PTSD for those with combat experience.

Keywords: Combat Exposure, Suicide Risk, PTSD, Trauma, Depression

Introduction

Suicide has emerged as, arguably, the most challenging mental health problem in the U.S. military today. It has endured as the second leading cause of death in the U.S. military for several years now, with numbers actually exceeding combat-related losses in Iraq and Afghanistan.^{1, 2} In 2008, suicide rates for active-duty soldiers surpassed those for comparable-age civilians for the first time in decades.^{3, 4} Prior to 2008, military service had actually served as a protective factor for suicide risk (4).

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Considerable data has emerged demonstrating increased suicide risk for veterans of Operation Enduring Freedom (OEF) and Operation Iraqi Freedom (OIF). In particular, those struggling with psychiatric diagnoses, including major depression, post-traumatic stress disorder, and substance abuse disorders, have been found to be at elevated risk for suicidal thinking, attempts and death by suicide.⁵⁻⁷ Findings from the past decade of war in Iraq and Afghanistan are generally consistent with previous findings from Viet Nam regarding the role of psychiatric illness in suicide risk.⁸⁻¹⁰ Individual vulnerability to suicide during military service has also been linked to a prior history of suicidal behavior, with 67% of those evidencing suicidality having made previous attempts.¹

The role of combat exposure in explaining the significant increases in suicide risk among soldiers has been explored and previous studies have linked combat exposure to the emergence, persistence and severity of suicidal thinking.¹¹⁻¹⁴ However, it has frequently been reported that forty percent or more of those dying by suicide have yet to actually deploy, a finding that has confounded understanding the precise role of combat exposure in estimating suicide risk for military personnel.¹⁵ The possibility of different suicide risk trajectories for deployed and non-deployed soldiers needs to be considered. Some effort has been made to understand the nature of the relationship between combat exposure and suicide risk, exploring unique vulnerabilities for OEF/OIF veterans and different markers of severity of combat exposure, along with potential mechanisms of action. This is particularly important for OEF/OIF veterans since they have grappled with more frequent and longer deployments than in past wars.¹⁶ A recent Institute of Medicine report concluded that there is a link between combat exposure and enduring suicide risk after redeployment, but the precise nature of the relationship is unclear.¹⁷ Additionally, previous research has yet to identify a specific link between the severity of combat exposure, severity of psychological symptoms and suicide risk in OEF/OIF veterans.

Initial efforts to explore specific characteristics of combat exposure that convey risk have identified several key elements. Fontana and colleagues¹² found a link between “killing” or “failing to prevent death or injury” and subsequent suicide attempts, suggesting differential impact based on the “type” or severity of combat exposure (e.g. a prominent role for initiating violence). Hendin and Haas¹⁸ concluded that guilt about combat was the most potent predictor of suicidality (including ideation and attempts). It is important to note, however, that both studies were prior to OEF and OIF, a critical consideration given the unique characteristics of OEF/OIF veterans’ combat experience.¹⁶ It is also important to mention that Luxton, Skopp and Maguen¹⁹ found gender differences in rates of post-traumatic stress disorder and major depression secondary to combat exposure, with women evidencing increased vulnerability relative to men.

Although limited, particularly with respect to OEF/OIF veterans, previous studies have identified a lack of social support as a significant risk factor for the emergence, persistence and severity of experienced psychological symptoms and post-traumatic stress disorder following combat.²¹⁻²³ Similarly, Gewirtz et al.²⁴ identified “couple adjustment” as a risk factor for post-trauma symptoms in returning OIF National Guard soldiers.

The purpose of the current study was to explore the relationship between the severity of combat exposure in OEF/OIF veterans, subsequent psychological symptoms (i.e. depression, general anxiety, sleep disturbance, and post-trauma symptoms) and severity of suicide risk. This appears to be the first study to explore the severity of

combat exposure and self-appraised “future” suicide risk in OEF/OIF veterans. In addition, the potential moderating role of social support was examined. Consistent with previous findings, it was expected that there would be a positive relationship between the severity of combat exposure and suicide risk. In contrast to previous work, the current study also explored self-appraised “likelihood” of a future suicide attempt; with it being hypothesized there would be a positive relationship between severity of combat exposure and self-appraised future suicide risk. Finally, it was hypothesized that social support would moderate the relationship between psychological symptoms and suicide risk in combat experienced veterans.

Methods

The National Center for Veterans Studies (NCVS) survey (34-item total, with multiple questions for some items) was completed by 252 OEF/OIF combat experienced veterans (218 male and 34 female). The survey was distributed by the Student Veterans of America (SVA), with opportunities for participation presented to member groups via web links embedded in electronic communications over a six-month period, along with a designated story and link on the SVA’s webpage. The survey took about 15-20 minutes on average to complete and included basic demographic information, several questions targeting available social support, along with the following clinical instruments: Generalized Anxiety Disorder-7 (GAD-7; 25), the Combat Exposure Scale (CES; 26), the PTSD Checklist (military version) (PCL-M; 27), the Suicidal Behaviors Questionnaire-Revised (SBQ-R; 28), the Patient Health Questionnaire-9 (PHQ-9; 29), and several items from the Insomnia Severity Index (ISI) (30). Informed consent for participants was completed on the first page of the survey, prior to the presentation of any survey items. On the informed consent document student veterans were invited to participate “in a study examining experiences since discharge from active military service”. Appropriate emergency contact information was made available to all participants if needed. The study was reviewed and approved by the appropriate institutional review board.

Each measure, including appropriate psychometric information is presented below. Characteristics of participants are presented in the results section.

Instruments

GAD-7. The GAD-7 is a brief measure of anxiety severity, with a focus on generalized anxiety disorder symptoms. The GAD-7 total score for the seven items ranges from 0 to 21, with cutting scores for mild, moderate and severe anxiety. Despite its original focus on generalized anxiety disorder, the GAD-7 has reported good operating characteristics for detection and severity ratings of panic disorder, social anxiety disorder, and PTSD and has demonstrated good psychometric properties.²⁵ Cronbach’s alpha for the current sample was excellent at .95.

CES. The Combat Exposure Scale was developed to assess the presence and severity of combat-related exposure.²⁶ The seven item scale assesses a range of characteristics of combat exposure including: being under enemy fire; percentage of soldiers in unit killed, wounded or missing in action; how often enemy rounds were fired; seeing others hit by incoming or outgoing rounds; and being personally in danger of being wounded or killed in action. Scores are weighted, with the subsequent total identifying exposure as ranging from light to moderate to heavy. The CES has been demonstrated to have good psychometric properties.²⁶ Cronbach’s alpha for the current sample was .86. It is important to note that the CES was not presented to participants that indicated they had not been in combat.

PCL-M. The PTSD Checklist-Military Version was developed to assess symptoms in response to “stressful military experiences.” The PCL-M is a 17-item self-report measure, with scores ranging from 17-85. The PCL-M provides for the assessment of both symptom type and severity, along with providing cutting scores for diagnosis. The scale has demonstrated excellent reliability, validity, and diagnostic utility.²⁷ Cronbach’s alpha for the current sample was excellent at .97.

PHQ-9. The PHQ-9 is a 9-item brief self-report measure of depression, with total scores ranging from 0 to 36.²⁹ The scale provides cutoff scores for mild, moderate, moderately severe, and severe depression. The PHQ-9 has demonstrated good psychometric properties, including sensitivity and specificity.²⁹ Cronbach’s alpha for the current sample was .93.

SBQ-R. The Suicide Behavior Questionnaire-Revised is a four item scale that taps into four dimensions of suicidality including: lifetime ideation, ideation frequency over the past year, suicide attempt history, and the self-reported likelihood of a suicide attempt in the future.²⁸ The SBQ-R has demonstrated good operating characteristics for several at-risk samples and has demonstrated good psychometric properties.²⁸ Cronbach’s alpha for the current sample was .84.

ISI-A. Three items were used from the Insomnia Severity Index,³⁰ including an assessment of initial, middle and terminal insomnia. These three items comprised what we identified as the ISI-A, i.e. the Insomnia Severity Index-Abbreviated. The ISI is a well-established and psychometrically sound instrument.³⁰ Given an interest in constructing a brief survey, and because sleep disturbance was covered by items in other instruments in the survey, three items were selected covering the insomnia construct. The data presented in Table 1, along with the correlation matrix for study measures would appear to support the construct validity of the brief scale. Cronbach’s alpha for the current sample was .87 indicating good reliability.

QASS. The four-item Quick Assessment of Social Support was calculated using four items from NCVS survey assessing general social support, with total scores ranging from 0 to 20. Five-point Likert ratings were used for each item. Item content addressed the presence and availability of positive support. For the current study, high and low social support were identified using scores +/- 1 SD from the mean. Cronbach’s alpha for the current study was .86 indicating good reliability, particularly for such a brief measure.

Sample Characteristics. A total of 252 OEF/OIF combat experienced veterans completed the informed consent, with 218 males (87%) and 34 females (13%). The male-female distribution is higher than current estimates from the U.S. Department of Veterans Affairs,³¹ with 2011 projections indicating a female veteran population of approximately eight percent.³¹ Given variable rates of response to the various sections of the survey, there is some difference in the total N for comparisons and, accordingly, the total N will be reported in each case. Given the survey nature of the study, the reason for non-participation was simply not completing scale items, with a total of eight participants completing the informed consent, demographic data, and the CES without additional scales.

The age range was 22-58, with a mean age of 32. With respect to ethnicity, the majority of participants were Caucasian (N=197, 78%), with good representation of other groups: African-American (N=10, 4%), Hispanic (N=35, 14%), Asian (N=9, 3%) and Native-

American (N=1,03%). Again, this distribution is generally comparable to current Department of Veterans Affairs estimates (2011) that indicate the current veteran population to be 77% Caucasian, 11% African-American, 6% Hispanic and 4% all other groups. Geographic distribution for survey participants was quite good, with the following breakdown across census regions (N=249): Northeast (N=76, 30%), Southeast (N=49, 19%), Midwest (N=50, 20%), South Central (N=21, 8%) and West (N=53, 21%). Representation was also good across branches of military service including (N=251): Army (N=95, 38%), Air Force (N=19, 8%), Marines (N=56, 22%), Navy (N=41, 16%), Coast Guard (N=2, 1%) and National Guard (N=38, 15%). As noted above, a total of 252 participants reported direct combat exposure during deployment(s), i.e. they answered positively to a question about whether or not they had seen combat, along with the Combat Exposure Scale, with variable numbers completing subsequent measures.

Results

Severity of Combat Exposure and Psychological Symptoms

As illustrated in Table 1, a total of 244 participants reported both combat exposure and completed subsequent scales, with variable numbers completing all scales for the reported comparisons (see reported N's for each comparison). In short, eight participants did not complete any of the subsequent scales. Table 1 provides the mean scale scores for each measure by category of the Combat Exposure Scale (CES), with increased CES severity a function of both initiating and receiving violent exchanges during combat. The CES does not assess specifically whether or not a combatant has "killed" in combat, only that he/she has "fired rounds," "seen someone hit by incoming our outgoing rounds," or whether or not they were "in danger of being injured or killed," "surrounded by the enemy," "were under fire" or "were on patrols or other dangerous duty". As can be seen in Table 1, the severity of psychological symptoms generally increases across CES categories and the severity of combat exposure, with the most profound differences between those with "heavy" combat when compared to all other categories combined. Those with "heavy" combat exposure reported significantly greater symptoms across the board when compared to all other categories including: general anxiety ($F[1,237]=14.33, p < .0001$), depression ($F[1,236]=16.70, p < .0001$), post-trauma symptoms ($F[1,231]=33.71, p < .0001$), overall suicide risk as assessed by the SBQ-R ($F[1,239]=7.21, p = .008$), and sleep disturbance ($F[1,242]=25.31, p < .0001$).

Although the frequency of previous suicide attempts was not significantly different across CES categories, those with "heavy" combat exposure rated themselves as "likely" to attempt suicide in the future with significantly greater frequency when compared to other CES categories ($X^2(4)=10.09, p = .039$). A very similar pattern was revealed when ISI-A scores were converted to high and low categories, with those experiencing "heavy" combat far more likely to be categorized as someone with significant sleep disturbance ($X^2(4)=29.83, p < .0001$), with 13 out of 17 (76%) reporting significant sleep disturbance on the ISI-A, in sharp contrast to the rest of the sample (26%). Those with "heavy" combat exposure experienced significant sleep disturbance at essentially three times the rate of those with less severe combat. Similarly, those with "heavy" combat exposure scored above the recommended cutoff for diagnosis of post-traumatic stress disorder (PTSD) at disproportionate rates in comparison to all other CES categories ($X^2(4)=24.88, p < .0001$), with 93% qualifying for PTSD using the PCL-M OEF/OIF cutoff in contrast to all others (49%), or almost double the frequency. In contrast to the work of Luxton, Skopp and Maguen (2010), no gender differences were uncovered in any of the comparisons summarized above, with only two females reporting "heavy" combat

exposure on the CES. This is a finding that should not be particularly surprising given the gender distribution of the sample.

Table 1.
Mean Scale Scores by Combat Exposure Category

Combat Exposure Scale Category (N=244)	SBQ-R Score Mean	PHQ-9 Score Mean	GAD-7 Score Mean	PCL-M Score Mean	ISI-A Mean	Number with Previous Suicide Attempts (% total N)	Number Rating a Suicide Attempt as "Likely" in the Future (% total N)
	SD	SD	SD	SD	SD		
Light (N=67)	5.5	14.6	12.1	28.2	6.1	3	2
	2.5	5.9	5.6	13.4	2.9	4.4	2.9
Light-Moderate (N=70)	6.9	16.2	14.7	35.8	6.9	6	6
	3.7	6.8	6.6	16.5	3.3	11.4	11.4
Moderate (N=56)	7.0	16.9	14.7	38.1	7.3	7	6
	3.6	6.9	6.4	16.5	3.5	12.5	10.7
Moderate-Heavy (N=34)	6.5	16.7	15.1	40.2	7.8	2	2
	3.3	7.0	6.2	18.1	3.9	5.8	5.8
Heavy (N=17)	8.9	23.3	20.1	61.3	11.2	2	4
	5.7	9.9	7.4	21.4	4.0	11.7	23.5

Light gray shaded areas for PHQ-9 and GAD-7 mean scores indicate "moderate" elevations, with dark gray shaded areas indicating "severe" symptom intensity.

Notes:

1. GAD-7 mean scores indicate "moderate" elevations, with dark gray shaded areas indicating "severe" symptom intensity.
2. Dark gray shaded areas for SBQ-R indicates mean scores above the recommended cutoff score for suicide risk.
3. All PCL-M mean scores are above the recommended cutoff score for "diagnosis" of PTSD in OEF/OIF veterans (Bliese et al., 2008).
4. ISI-A does not include variable cutoffs for levels of severity, only that higher scores indicate increasingly severe symptoms.

The Relationship between Combat Exposure and Suicide Risk

As summarized above, only a handful of studies have explored the relationship between the nature of combat exposure and suicide risk in OEF/OIF veterans, with none also exploring a range of psychological symptoms. As might be expected given the results summarized above. There was a very strong relationship between PTSD and suicide attempts in our sample, with 90% of those reporting a previous suicide attempt also reporting significant symptoms of PTSD ($c^2(1)=12.13, p<.0001$) and 90% of those reporting that a suicide attempt was "likely" in the future also scoring above the PCL-M cutoff for diagnosis of PTSD for OEF/OIF veterans ($c^2(1)=11.35, p=.001$).

Hierarchical multiple regression was used to explore main effects, along with social support as possible a mediator and/or moderator. Combat exposure itself (CES total score) did not provide any additional power in predicting SBQ-R total scores or ratings of the "likelihood" of a future attempt once the variance attributable to post trauma symptoms (PCL-M) was allocated. Given the significant relationship between PTSD and suicide risk, the role of PTSD and depression in predicting potential suicide risk is a

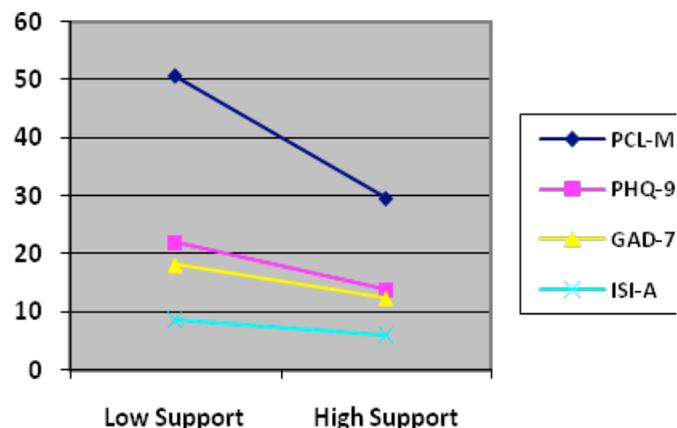
critical question. Analysis to test the moderating and mediating effects was consistent with suggestions by Baron and Kenny.³² In order to test for the potential moderating effect of PTSD, we regressed “likelihood of a suicide attempt in the future” on the moderator (PCL-M), the predictor (PHQ-9), and the interaction term for depression and PTSD symptoms. Consistent with Baron and Kenny’s³² work, a significant interaction term indicates moderation. The interaction proved significant ($F [1,218] =5.19, p=.024$), consistent with the notion that the severity PTSD symptoms moderates the relationship between suicidality and depression. Interestingly, the moderating role of PTSD symptoms did not prove significant when SBQ-R total score was used as the dependent variable, suggesting a difference in predicting self-appraised “future” risk.

Exploring Social Support as a Moderating Variable

The role of social support as a potential moderating variable in the relationship between all measures of psychological symptoms and suicide risk (as predicted by both SBQ-R total score and individual ratings of the “likelihood of a suicide attempt in the future”) was also explored using hierarchical multiple regression. As illustrated in Figure 1, mean scores across all scales are significantly different at low and high levels of social support, including anxiety (GAD-7) ($F[1, 102]=21.31, p<.0001$), depression (PHQ-9) ($F[1,99]=28.76, p<.0001$), post-trauma symptoms (PCL-M) ($F[1,98]=26.11, p<.0001$), suicide risk (SBQ-R) ($F[1, 103]= 5.56, p=.02$), sleep disturbance (ISI-A) ($F[1, 105]=14.96, p<.0001$) and self-rated “likelihood of a suicide attempt in the future” ($F[1, 104]=4.52, p=.036$). Social support was demonstrated to serve as a moderator in all cases, including general anxiety, depression, post-trauma symptoms, and sleep disturbance. Consistent with Baron and Kenny’s (32) work, a significant interaction term indicates moderation. The interaction proved significant in each hierarchical regression:

- General anxiety (GAD-7)($F [3,228] =12.71, p < .001$),
- Depression (PHQ-9)($F [3,228] =20.16, p < .001$)
- Post-trauma symptoms (PCL-M)($F [3,227] =12.87, p < .001$)
- Sleep disturbance (ISI-A)($F [3,233] =9.23, p < .001$)

Figure 1.
Mean Psychological Symptom Scores Across High and Low Social Support Groups



Discussion

The relationship between the severity of combat exposure, subsequent psychological symptoms and suicide risk in OEF/OIF veterans has received limited attention. This is the first study to explore the severity of combat exposure and self-appraised future suicide risk in OEF/OIF veterans. Additionally, the current study is among the first to explore the moderating role of social support in the relationship between psychological symptoms and suicide risk. Current findings cluster around three primary themes. First, that the severity of combat exposure is linked to both the severity of post-trauma symptoms and self-appraised future suicide risk, with those reporting “heavy” combat exposure experiencing significantly more severe post-trauma symptoms, more severe sleep disturbance, greater depression, more significant general anxiety, and greater self-appraised risk for a suicide attempt in the future when compared to those with less extreme combat exposure. Heavy combat exposure is clearly a significant risk factor for not only PTSD but also suicide. Somewhat surprising, 76% of those with “heavy” combat exposure reported significant sleep disturbance and 93% scored above the PCL-M recommended cutoff for diagnosis of PTSD, rates that were triple and double, respectively, those with less extreme combat experiences.

These findings are certainly consistent with previous work linking suicide risk in OEF/OIF veterans to the presence of psychological symptoms in general, major depression, PTSD and substance abuse specifically.^{1, 5-7, 13-14} Current findings, however, would suggest that it is important to focus on the relative severity of combat exposure when assessing, formulating or treating suicide risk and associated psychological symptoms (particularly PTSD), with a particular emphasis on “heavy” combat exposure. Findings also suggest that not all combat experiences are the same and that simply looking at the presence or absence of combat exposure could result in misleading findings. Despite that a considerable number of military suicides are among soldiers that have never deployed,² current findings would suggest the need to explore potentially unique clinical models for those with combat experience. Current data suggest that there are likely different pathways to suicide for those with and without combat experience. For those with combat exposure, the pathway appears to be a distinctly clinical one dominated by the presence of severe post-trauma symptoms, particularly significant sleep disturbance. The pathway to suicide for non-deployed military personnel, or those deployed without combat experience, may well be remarkably different. Current findings would suggest the need for Department of Defense personnel to consider multiple “suicide risk models,” rather than attempting to identify a single, inclusive model for all personnel. Efforts to identify a single model may well be flawed given current results. Those struggling with profound post-trauma symptoms appear to have a specific clinical trajectory involving PTSD.

The second theme revolves around the finding that combat exposure itself did not predict suicide risk once the variance attributable to PTSD was accounted for in the equation. Clearly, individual reaction to trauma is remarkably different and dependent on a host of variables, many developmental in nature.²⁴ However, current results suggest remarkably high rates of post-trauma symptoms and potential PTSD diagnoses (i.e. 93%) among those with “heavy” combat experience. Additional analysis revealed that PTSD does in fact moderate the relationship between depression and self-appraised risk of a suicide attempt in the future. A failure to find such moderation using the SBQ-R total score as the dependent variable suggests a potentially unique relationship between PTSD symptoms and “future” risk. In line with the “conservation of resources theory it would be interesting to explore this possibility in a prospective study, examining the role

of persistent PTSD symptoms in individual “resource depletion” over time and its relationship to future suicide risk.³³⁻³⁴

The third theme revolves around the moderating role played by social support in the relationship between all measures of psychological symptoms and suicide risk (including both SBQ-R total score and self-appraised risk for a future attempt). As reported above, social support was demonstrated to moderate the relationship between all symptom categories (general anxiety, depression, post-trauma symptoms, and sleep disturbance) and suicide risk. Given previous research findings with military personnel, it is not surprising similar trends were uncovered in OEF/OIF veterans.²⁰⁻²³ The role of social support clearly warrants additional and more detailed study, as it was addressed only in superficial fashion here, with a very brief measure of available and positive support. The potential role for social support as both a protective factor for suicide risk and high value target for intervention and treatment is obvious, but warrants additional scrutiny.

The current study is not without significant limitations. The potential for selection bias in the sample is problematic, but it is important to consider that the clinical representativeness of the sample appears quite good, with evidence of significant psychopathology as indicated by the mean scores in Table 1. As a result, it would appear to be a good sample for exploring and modeling relationships among the targeted clinical variables. Similarly, although reasonable, the total sample size is limited, particularly with respect to those with “heavy” combat exposure. The gender distribution in the sample is also limited, but generally consistent with the Department of Veterans Affairs numbers. The brief nature of the measures is also a concern, as is the lack of formal clinical diagnostic information and detailed psychiatric history. In particular, the Quick Assessment of Social Support (QASS) has a myriad of limitations, not the least of which is how well it truly represents the broad construct of social support. At a minimum the QASS does not provide any differentiation in support provided by family and/or friends.

Despite the limitations noted, current findings do provide a reasonable foundation on which to base future work, both research and clinical, focused on the severity of combat exposure in relation to both psychological symptoms and suicide risk in OEF/OIF veterans. Available results also suggest the need for the Department of Defense to explore variable models of suicide risk for those with and without combat experience. The distinct clinical trajectory of those with combat exposure is readily recognizable, with post-trauma symptoms playing a pivotal role. The importance of identifying different suicide risk models for deployed, non-deployed and combat experienced military personnel cannot be overstated, as it would result in very different prevention strategies, assessment methods, and treatment targets.

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Access to Psychological Healthcare, Gun Control and Public Safety

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Introduction

Access to psychological treatments should not be more difficult than access to purchasing firearms. The tragic massacre of school children in Newton, CT just prior to their Christmas holidays has re-awakened public safety concerns about access to mental health care and firearm violence. Legislators are re-examining public policies with hope of finding ways to prevent such unprovoked violent public acting out of personal problems. Proposals to increase access to mental health care have been overshadowed in the media by demands to increase restrictions on the right to bear arms. This paper focuses on deficiencies in healthcare policies and directs legislative attention toward increasing access to corrective behavioral interventions for public safety. It is proposed that by integrating access to psychological healthcare into ER services, Emergency Rooms of hospitals can be an effective first line of community defense in preventing public violence by emotionally distraught people.

The tragic massacre of defenseless children at Sandy Hook Elementary School shocked the nation and brought on a heartfelt period of mourning for the children and their families.¹ In the immediate shock of the moment, many questioned how such an inhumane act could happen. The sheer incomprehensibility of the slaughter further enflamed concerns of the public about the risks posed by mentally ill people living in their community. Public awareness of mental health risks was already high due to media attention to recent instances of public violence in an Aurora, CO theatre,² the shooting of Congresswoman Giffords that killed innocent bystanders,³ as well as, the military massacre at Fort Hood, TX by an Army psychiatrist.^{4,5} People clamored to know how such unprovoked irrational behavior happened, and more specifically, how this can be prevented in the future.

Despite public demands for answers to important public safety questions in these violent incidents, political opportunism and the media diverted public attention away from providing prevention with psychological healthcare. Instead, media focus was on the highly charged conflict between gun control advocates and the National Rifle Association (NRA) supporting individuals' rights to bear guns. The NRA even recommended staff of schools be trained and armed as a means of preventing future instances of gun violence in schools. New calls for expanded gun control laws were proposed and quickly found

¹To our knowledge, Major Hassan's mental status has not been made public. The Department of Justice officially classified this massacre as "workplace violence" although Nidal Hassan's behavior prior to the shooting was clearly unprofessional. According to his peers, he repeatedly failed to meet standards of military discipline prior to this violent outburst. Many are unconvinced of the workplace violence classification and believe "terrorist influences" actually triggered his attack at Fort Hood.

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support from the White House. The Vice-President was assigned the task of overseeing this debate seen by many as a challenge to the Second Amendment of the Constitution protecting citizens' right to bear arms. The White House utilized the news media to communicate its gun control views and issued a 13 page Press Release on January 16, 2013.⁶ This Press Release devoted ten pages to strongly back gun controls. The press release also included a scant three pages addressing ways to fix the "broken mental health system." The proposed mental health care fix aimed to provide improved access to mental health care by training additional 1,000 (modified to 5,000 on 2-18-2013⁶) school counselors to deal with behavioral problems in schools. Nearly all parties from both sides of the debate agreed safety measures regarding the mentally ill required reconsideration. This paper seeks to refocus the discussion from politics to considering effective treatments for mental disorders that can reduce the risk of unprovoked tragedies in the future.

Congress and State legislators are aware of the public alarm and have been quick to respond to mental health shortages cited in the White House press release. Congress, within days of the shooting, responded to the behavioral health crisis in Medicare by restoring funding for mental health services that had been scheduled for a 23% reduction in reimbursement of mental health providers in Medicare. This draconian cut in mental health reimbursement rates proposed by the Center for Medicare and Medicaid and passed by Congress was scheduled to take effect January 1, 2013. This proposed cut in services had ignored the critical shortage of mental health providers that has existed since Medicare was enacted a half century ago. The quick response of Congress, though an important correction, does not increase the availability of psychologists' services to care for victims and families in times of disasters. This gap exists because of Medicare's disparate treatment of doctors of psychology and physicians. Psychology remains the only doctoral level health profession not defined as physicians in 1861r in Medicare. This glaring omission also neglects the public safety requirements for preventive mental health services in federal/state Medicaid programs that are sorely in need of reform by additional prompt federal and State legislative action.

State legislators also have offered proposals to deal with mental health shortages in their States. For example, the Arizona House Minority leader, previously sensitized by the shooting of AZ Congresswoman Giffords, offered a broad array of proposals to improve mental health care.⁷ These proposals included a full restoration of \$23M in cuts for funding of the State Program for the Seriously Mentally Ill (SMI), adding \$62M to double the number of school counselors, adding \$20M for cameras and safety gates in schools and another \$17M for the State's Safety Program for school resource officers.

As well intentioned and worthy as these proposals may be, they still must run through the legislative gauntlet in a time of fiscal austerity. The proposals listed above do not address the shortages of trained mental health practitioners. The Arizona Department of Health Services was in Court receivership for over 30 years due to failure to provide access to effective mental health care. Governor Brewer announced expansion of the Arizona Medicaid program to resolve unmet mental healthcare needs.⁸ Restoration of \$23M for funding the Arizona State program or the Seriously Mentally Ill deals only with the current program and not its unknown shortages. The unknown factor is the extent of unmet mental health needs among the beneficiaries made eligible by the new Patient Protection and Affordable Care Act.

There are still chronic shortages of psychological health services in all States due to

shortfalls in funding that exist in Medicare and Medicaid. The Health Resources and Services Administration (HRSA) currently estimate that 90 million people are living in 3,800 mental health shortage areas nationally requiring 6000 additional practitioners to meet existing needs already identified.⁹ The President initially proposed adding only 1,000 counselors and later amended the number to 5,000.⁶ The number of people living in mental health shortage areas existing in every State is nearly double the estimated 56 million people living in 5,800 primary care shortage areas requiring 16,000 additional practitioners to meet current needs. There are an estimated 45 million people living in 4,500 dental shortage areas needing an additional 9000 dentists. By comparing the estimated needs per person with the size of shortage areas by population it is apparent that HRSA was using a different yardstick for each of these health professional projections of health care needs. If the estimate that 20+% of the US population has mental health needs is correct, then the behavioral healthcare personnel needs have been seriously underestimated. Simple arithmetic suggests there could be 9,000 shortage areas with 18,000 practitioners needed. Even if only 4,500 mental health shortage areas were created to compare with the needed 9,000 dentists, the estimated need for mental health practitioners would be at a minimum of 12,000—double the number currently projected.

The above estimates do not consider mental health needs of 1.4 million inmates in federal and state prisons and county jails where percentage of prisoners with mental health needs are estimated to be 50% or higher.¹⁰ There are over 200,000 veterans returning from deployments in Iraq and Afghanistan with 25% or more needing behavioral intervention for PTSD and serious depression.¹¹ It is also reported that only half of children in public schools with identified needs for behavioral intervention receive the necessary care. Thus, there are vast numbers of people with unmet mental health needs. The public, its representatives and leaders are rallying for increased mental health care after the Sandy Hook tragedy. Therefore, it is time for psychologists and other behavioral health specialists to apply pressure on public policy makers for corrective action.

Access to Firearms

Access to firearms is more convenient than access to psychological care. If people with unmet mental health needs were all potentially violent then America would need to be an armed camp to prevent gun violence. There would need to be a policeman at every corner. Fortunately, unprovoked violent episodes by mentally ill persons are relatively rare. Family members and those in close contact with potentially dangerous people are able to learn warning signs of disturbed individuals to alert authorities and protect themselves. Thus, it is from people with whom we do not have close contact that unexpected outbursts of violence are likely to occur. Preventive behavioral healthcare services made available by federal and State Medicaid law changes can be a major part of the answer to securing public safety.

Screening purchasers of guns by profiling citizens who have sought behavioral health services has been shown to be a costly and ineffective preventive measure. The presence or absence of a mental diagnosis cannot be the criteria for limiting citizens to bear firearms. Furthermore, profiling by mandatory screenings of people with a history of receiving behavioral healthcare is likely to increase public stigma on those who seek mental help while doing nothing to address funding necessary to increase access to needed care. The stigma of mental health care is a major deterrent to people seeking

psychological care who need such care. Lack of access to behavioral care is the main reason for lack of prevention of unprovoked violence.

Prevention of Violence by Public Policy Changes

Opponents to increasing mental health services cite the ineffectiveness of the broken mental healthcare system. Mental health practitioners' diagnostic skills are frequently discounted because potentially violent people were not identified before these public displays of anger and violence occurred. Demanding foolproof predictions of violent episodes is unrealistic. Behavior of individuals cannot be predicted accurately based on statistical information about group behaviors. Science cannot predict when a person will wake up any given morning with a burst of energy feeling they can conquer the world. Nor can prediction of public violent acting out personal conflicts be perfect.

Behavioral health practitioners make their predictions of future behavior of an individual based on their intimate knowledge of the past behaviors of the individuals in question. Family relationships, school, military and police records provide vital information in making such predictions. These predictions also consider interpersonal, vocational and other life circumstances. To make predictions of the future behavior of an unknown person is not possible without this important data. It requires time to secure this essential recent and past history of a person to assess potentials for violent acting out behaviors.

When those in need of mental treatment refuse to cooperate in their evaluation, mental health professionals can be denied access to essential information. Dr. Lloyd Sederer, a noted mental health specialist wrote¹², "Patient protections have become rigid rules excluding families from patient care and exceeding common sense." He cites an example of person arrested for a minor infraction who refused to give permission to contact his family to doctors in the Emergency Department of a hospital. The persons' refusal of this permission delayed treatment and involuntary hospitalization was necessary. He adds, "An individual with a mental illness that interferes with his judgment, self-interest, self-preservation and safety represents a profound challenge for families and clinicians." State laws limit the time a person can be held involuntarily for questioning without a court order. The question of public safety policy versus personal privacy requires careful re-examination in creating new public policy. Programs providing ready access to early behavioral health care can enhance public safety.

"Intensive Outpatient Care is Far Superior to Involuntary Care" was a Bakersfield Californian headline in its Opinion section that cited psychologist Dr. James Waterman.¹³ Dr. Waterman is Director of the Kern County Mental Health Department. He noted that only one county, Nevada County, in California, has adopted "Laura's Law" that authorizes involuntary outpatient treatment. Treating a person against their Will was so extremely controversial that the California legislature did not make provisions for involuntary medications or even funds to implement this law. Dr Waterman and his staff circumvent this limitation in the CA Mental Health Law by providing prompt access to community mental health services by reaching out with their Student Assistance Program. This program partners with schools and with the help of teachers provides services to troubled children by actively working with their families. Kern County has invested \$7M in the past 3 years with funds made available by California's Proposition 63. Adults also have access to this same aggressive outreach programs. The first year results showed reduction of jail days by 92%, an 83% reduction of homeless days and an 85% reduction in hospital days. Behavioral healthcare services properly applied do

work for the benefit the community. Dr. Waterman emphasizes the key to these reductions is the availability of intensive care services.

A recent review of meta-analyses of prevention of psychosis using early psychological interventions was published in the British Medical Journal.¹⁴ A co-director of the National Collaborating Centre for Mental Health was listed among the authors. "Mental health conditions diagnosed as schizophrenia disrupt social and family relationships, resulting in severe educational and occupational impairment, lost productivity, unemployment, physical illness, and premature mortality. As a result, schizophrenia costs about \$88 000 per person per year in the UK. Schizophrenia is usually preceded by a prodromal period lasting one to three years. This prodromal period is characterized by a variety of non-specific behavioral and psychological symptoms, functional deterioration, and by both attenuated positive symptoms and "brief limited intermittent psychotic symptoms" (BLIPS). Among people at "ultra high risk" of psychosis, about 22% to 40% transition (have a psychotic breakdown) within 12 months." Interventions that delay or prevent transition to psychosis from this prodromal syndrome are clinically and economically important. Lawmakers must consider realistic ways to give preventive behavioral healthcare due respect.

Antipsychotic drugs and family therapy can reduce the likelihood of relapse for established and first episodes of schizophrenia. Cognitive behavioral therapy (CBT) may reduce symptoms and hospital admissions for people with schizophrenia. Combining these treatments in an integrated strategy can add substantial clinical and economic benefits for people with psychosis and early schizophrenia. These interventions could prevent or delay the onset of psychosis and schizophrenia if delivered to people at high risk, and several trials have examined whether these interventions prevent transition from a high-risk state to psychosis. "Overall, five trials of CBT had a moderate effect on transition to psychosis at both 12 and 18 months." Access to effective psychosocial interventions could reduce transition or delay onset of psychosis, compared to supportive counseling or treatment as usual.

Professional Shortages in Training Mental Health Specialists

There must be an adequate supply of professionally trained practitioners available and accessible to achieve the benefits of early interventions. Health Resources and Services Administration (HRSA) data reports a chronic shortage of mental health specialists in medicine and behavioral health.⁹ Psychiatry is an aging and dying specialty that is not reproducing itself.¹⁵ Psychiatry is not able to recruit enough trainees to fill its allocated residency training slots and has to recruit 44% of its residents from among foreign medical graduates.¹⁶ Even with using United States funding for foreign medical graduates, not all of the psychiatric training slots are filled. Only about half of these psychiatric residents recruited through HRSA J-1 waivers speak English as their primary language. Psychiatric residencies train their residents to use psychotropic medications rather than behavioral therapy that require both fluent English and a good understanding of American culture and diverse populations.

There is high demand for doctoral training in clinical psychology in contrast to low demand for training in psychiatry. Yet, there are not enough internships in psychology to produce the required number of behavioral health specialists.¹⁷ There are also chronic shortages of postdoctoral training positions in medical psychology. It stands to reason that moneys from unfilled psychiatric residency allocations could be used to fund postdoctoral training of psychologists to meet State licensure requirements and expand

access to care. Medicare graduate education training funding is not available to psychologists trained at the doctoral level that is available to physicians and nurses. Therefore, doctoral level psychologists often graduate with large student loans. The number of psychologists can be increased promptly by may be expanding the number of positions that offer loan repayment programs and assistance in meeting the experience requirements for licensure.

Primary care physicians are also in short supply and are pressed by public policy into writing 70% of the psychotropic medications prescribed under managed care.¹⁸ Nurse practitioners and physicians assistants without specialty training in behavioral healthcare are now being used by managed care to prescribe psychotropic medications to make up for the shortages of primary care doctors. The military has been expanding its utilization of medical psychologists since the 1990s. It has begun embedding psychologists into combat units. Psychologists with training in medical psychology are assigned to primary health care units to provide the necessary behavioral health care consultation and treatments on and off battlefields.

Limitations of Psychotropic Medications

There is a growing controversy regarding the efficacy of psychotropic medications. The deceptive advertising practices of drug companies and their misrepresentations of the research on the effects of medications frequently appear in the press. Dr. John Caccavale et al discuss these issues extensively in "Failure to Serve: A white Paper on the use of medications as a first line treatment and misuse of behavioral interventions."¹⁹ This comprehensive document is suitable to present to federal and State legislators. Some of the findings include: The efficacy of antidepressant medications is limited overused for patients' temporary low periods. Using cognitive behavioral therapy (CBT) alone or in combination with medications is superior to the use of medications alone. CBT has fewer side effects than psychotropic drugs with a reduced rate of relapse for depression and other disorders.

Emergency Care

Public policy has resulted in "the broken mental health system" based on a model like that of volunteer fire departments waiting for a disaster before being called to action. No community would accept a volunteer fire department that is inadequate to protect their homes and family. When it comes to mental healthcare we too often wait for disaster to happen to sound the alarm about the lack of access to behavioral healthcare specialists. When disasters occur in a community the Red Cross and other community service organizations rise to the occasion to deal with the mental and physical needs of people affected by the catastrophic events. Since 1992 psychologists have collaborated with the Red Cross and Federal Emergency Management Agency (FEMA) to deal with the human element of disasters. Psychology has created a Disaster Response Network to provide pro bono emergency psychological care that now numbers 43,951 providers connected by an electronic contact Listserv.²⁰ This number represents nearly one out of three licensed psychologists and is equivalent to the total number of members of the psychiatric association. This organized mental health reaction force is a national resource in dealing with crisis needs and should be front and center in discussing mental health crisis responses. It is time to make this volunteer Disaster Response Network a standing national resource for community mental health services supported by Medicaid for ready access to care!

Medicaid, Title XIX of the Social Security Act, was designed to provide mental and physical health services for the medically indigent. Because of the discrepancy between mental and physical health care funding that existed when Medicare and Medicaid were enacted, mental health services were made a State option in this federal/state healthcare legislation. As a consequence States, such as Arizona, gained waivers from federal requirements of the Medicaid in order to develop their own less expensive mental health plan that is also less effective.²¹ Such waivers allow state mental health services in Medicaid to vary greatly and have allowed psychological services to be excluded as a cost savings measure. States have cut annual mental health expenditures by \$1.6M over the last 3 years. Mental health services are paid at a reimbursement rate that is so low that trained professionals cannot afford to provide the care authorized. Community mental health clinics cannot survive at Medicaid payment rates alone. Medicaid reimbursement rates must be increased and supplemented by block grant funds to States through Title XX of the Social Security Law. Health care practitioners are not reimbursed directly from Block Grant funds to States. The Mental Health Parity Act that applies to private health insurance plans and does not regulate Medicaid benefits. Ohio and Missouri are the only States known to require psychologists in their Medicaid program. These two State plans serve as a model for other States that could provide psychological services through Medicaid. One can only wonder how things may have been different in Connecticut if access to psychological services Medicaid had been available. By making psychological services a required benefit citizens of every state in the nation would have access to effective behavioral health care to provide early intervention for mental healthcare needs. This preventive legislation should authorize mental health specialists to be available in the Emergency Departments of hospitals that receive Medicaid funds. Although making these services of psychological has a cost, these costs actually offset other medical service costs and reduce the cost of care to the ER Department and the hospital.^{22,23,24} There is a potential source of additional funding available through the Patient Protection and Affordable Care Act that could provide this care in the future. The time to enact State preventive Medicaid legislation is now!

A Plan for Psychological Care and Prevention

The tragedy of Sandy Hook and other unprovoked acts of public violence by people with mental disorders have captured the attention of the American public and their federal and State representatives. There is now a desperate search for actionable plans to prevent such tragedies from occurring in the future. Psychologists have a keen interest in resolving crisis situations for public safety and have developed effective treatments to resolve crises. Psychological treatments designed to improve human behavior can also prevent reoccurrences of violent behavior that lead to destructive outcomes. Early interventions have the greatest cost-benefit in preventing disruptive behaviors in preschool and school age children and youth.²⁵ The onset of mental disorders frequently occurs during teenage years and sometimes even before. The solution to prevention in mental health is providing ready access to effective early diagnosis and treatment through behavioral care.

The Social Security Acts are the chief sources of mental health funding to diagnose and treat mental conditions and measure the outcomes of healthcare. Medicaid has become the principle source of the funding of mental healthcare services and can have a major preventive effect. Unfortunately, Social Security does not define licensed psychologists with doctoral training as “Physicians” in Medicare and therefore limits their services. Because psychologists were not defined as “Physicians” in Medicare their services were made optional Medicaid in programs operated by States. Psychologists have shown little

interest in Medicaid because of the low reimbursement rates for mental health services paid by these State operated programs. Yet, psychologists have responded to disasters in States by offering their services pro bono through the Red Cross and FEMA. This reveals a serious gap in public safety policies that can be corrected by a State including psychologists' services in its Medicaid plan. Psychology must call upon legislators to enact such measures in Medicaid.

Civic interest and professional pride of psychologists have mobilized a psychology Disaster Network and that can be redirected toward public safety opportunities by behavioral healthcare. Emergency Rooms (ER) of hospitals are often the first contact mentally disturbed children and adults have with professional healthcare. ERs are overflowing with uninsured patients eligible for Medicaid.²⁶ However; Medicaid reimbursement rates are so low that some hospitals have closed their ERs. Most ERs do not provide direct access to evaluations by mental health specialists. Patients with suspected mental conditions are evaluated in ERs using costly medical examinations to rule out physical causes before referrals are made for behavioral health services. Behavioral health services are often unavailable at the hospital and must be shunted to another community agency for care. This medical triage procedure is an inefficient use of professional staff and is a costly burden on the ER and the hospital ---and it does not assure treatment for the person that visited the ER for help.

Substantial cost savings and appropriate use of ER medical staff that is in short supply can be achieved by providing ready access to psychologists assigned to the ER.²² Integrated mental health patient triage has resulted in prompt diagnosis and effective clinical outcomes by using early behavioral interventions. The military has demonstrated the effectiveness of this cost saving model of integrating psychologists into ERs and primary care departments. The military has been embedding medical psychologists into primary care units on and off battlefields for several years.²⁷ The Department of Defense has expanded this enhanced integrated primary care service to deal with the influx military mental casualties with PTSD from Iraq and Afghanistan. This has been proven to result in a more effective fighting force and lower mental casualty rates. The Veterans Health Administration also issued a request for additional mental health services.²⁸ The Affordable Care Act poses a greater strain on ERs by having to serve previously uninsured citizens. State Medicaid programs can expand preventive mental health services by adopting the Behavioral Health Optimization Program model that integrates psychological consultants into ER Departments in order to meet public health safety needs.

Integrating psychologists into community hospital Emergency Rooms, supported by realistic reimbursement rates from Medicaid, is a cost-efficient plan for early behavioral intervention to reduce unprovoked violence and add to public safety. This enhanced behavioral health plan for ERs offers immediate public safety benefits by incorporating the preventive services of practicing psychologists.²⁷ Failure to adopt such policies in Medicaid will continue community safety risks from agitated individuals with untreated mental conditions.

The White House proposal to increase public safety by training inexperienced personnel as counselors to the entry level of educational or school psychologists could not be implemented until this training is completed. The advantage of adding psychological consultation to ER Departments is that these mental health specialists are immediately available and can provide their services on a 24/7 basis, 365 days a year, without being

confined to hours when schools are open and are in session. The best use of allocated training funds would be to support additional postdoctoral training experience in medical psychology and integrate specialists in medical psychology into ER Departments.

Licensed psychologists must challenge State legislators to enact this proposal to provide their behavioral health care services in Emergency Department of hospitals. The public should not have to wait for their State psychological associations to act. Psychologists can also contact their local hospital administrators and doctors in the ER about utilizing their services for the benefit of the community. Psychologists working together can put pressure on their legislators to make any necessary changes in the State Medicaid plan to implement this integrated treatment and prevention in community hospital ERs. Psychologists, as healthcare professionals, already provide treatments for correcting behaviors to increase public safety and prevent unprovoked violence. Psychologists must not let the sacrifices of the children of Sandy Hook, their families and friends be in vain.

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Resources

Dr. Ken Pope researched and recovered 39 studies assessing violence that appeared or are in-press in peer-reviewed journals in 2012-2013. He posted them on his website and this resource is available at: <http://bit.ly/KenPopeResearchOnAssessingViolenceRisk>. He generously permitted reposting of the access to this material to assist readers.

Changes in Medicare Hospital and Healthcare Facility Rules Affecting Psychology

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Abstract

In 2012 the CMS Agency changed the level of supervision required for psychologists in hospital, residential or partial hospital settings to General Supervision from Direct Supervision by a physician. Healthcare is changing and it has become increasingly clear that the biopsychosocial model of behavioral healthcare will replace and succeed the medical model. The Patient Protection and Affordable Care Act moves medical psychology toward integrated care. Incentives are available for establishing multi-disciplinary staffs and facilities. The healthcare industry offers increasing opportunities for well-trained psychologists. Psychology has developed training literature, relevant specialty boards, and a significant history and leadership positions in hospitals and healthcare facilities. Psychology is ready and able to improve healthcare in the nation's hospitals and other healthcare facilities. However, psychologists will have to recognize that the hospital and medical culture generally do not know how to implement the best use of psychologists and develop effective psychological programs. Psychologists will have to advocate, educate, and affiliate with these facilities to bring about these significant changes in healthcare. The laws and rules are currently in place to do so!

Last year, the Academy of Medical Psychology (AMP) board became aware of a special group called together to consider revision of the physician supervision rules. The Centers for Medicare & Medicaid Services (CMS) established a process to obtain independent advice from the Hospital Outpatient Payment Panel regarding the appropriate supervision levels for individual hospital outpatient therapeutic services (76 Fed. Reg. 74360). CMS charged the Panel with recommending at the request of the Agency or the public the supervision level that will ensure the appropriate quality and safety for delivery of a given service as defined by its Healthcare Common Procedure Coding System (HCPCS) or Current Procedural Terminology code. AMP provided recommendations to the Panel, and to professional psychology organizations (APA PO, NAPPP, some state psychological associations and divisions; encouraging them to support changes in the noxious Direct Supervision rules).

This rule change creates or expands practice opportunities for medical psychologists and also for clinical psychologists with training in psychopharmacology in the 5,000 Community Hospitals in the US. Nearly 3000 of these Community Hospitals are in urban areas and almost 2000 are in rural areas. These hospital figures include 421 psychiatric hospitals but do not include college and university infirmaries that are often located in urbanized rural communities. Psychologists sometimes mistake "rural" to mean "agricultural" and neglect to recognize that 20%+ of the US population lives in urbanized rural areas.

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Author's Note

This Medicare hospital rule change is especially gratifying to me as a rural practitioner and as Director of behavioral care in a rural hospital. They vindicate to my family my eleven years as Chair of the APA Division of Independent Practice Hospital and Healthcare Facilities Committee, my work on APA Council, my work on an ABPP Board and on the ABMP board, with the national practitioner association (National Alliance of Professional Psychology Providers; and in my book and other writings on hospital practice.¹ I have championed access to psychological services and the evolution out of a strict Medical Model to improve the nation's hospitals and healthcare facilities and educated psychologists about the history and importance of hospital practice in the American healthcare system.^{2,3} For over 30 years I have stood with others against violations of restraint of trade and anti-trust laws including Ohio's successful lawsuit against JCAHO hospital rules, as well as, other direct and indirect efforts to block psychologists work in hospitals.⁴ I received a Psychology Defense Fund Grant and successfully defended psychology's right to provide services without scope of practice in a Missouri medical/surgical hospital. I led the Missouri Psychological Association as their President to get permissive rules for hospitals who want to add psychologists to Medical Staff Membership. We stand on the shoulders of the giants in psychology relative to the foundation law and rules and regulations from the Virginia Blues case to CAPP vs. Rank⁵ to the American Psychological Association's development of a manual describing the role of psychologists in hospitals.⁶ Division 42 of the APA and seminal psychology divisional leaders and the APA Practice Directorate made huge inroads in advocacy for patients access to quality psychological services in America's hospitals.^{7,8,9b} Many psychologists and psychiatrists have blocked extreme biomedicalization of mental disorders_helped start and usher in collaborative care and integrated care approaches to behavioral healthcare.^{10,11,12,13,14,15}

The increased opportunities to practice in hospitals has the potential of increasing incomes of psychologists with Medical Staff privileges in a hospital, especially, if they have Board Certified training in psychopharmacology. Board Certification is required or encouraged by hospitals seeking to qualify for hospital accreditations. Certified training in psychopharmacology that is Board Eligible is available through distance leaning programs costing as little as \$2500 or university-based MA degree programs costing as much as \$15,000 plus travel expenses. Costs for RxP training can be recovered in one year or less by increased practice incomes. In addition, hospital privileges can authorize reimbursement for telehealth care by psychologists trained in telehealth. Board certification with training in psychopharmacology and telehealth can increase practice incomes of psychologists substantially even in present market conditions.

In May of 2012 the Center for Medicaid and Medicare Services (CMS) published a final decision on recommendations of the hospital outpatient program (76 Fed. Reg. 74360). In this rule the Agency changed the level of supervision required for hospital, residential or partial hospital settings. In a program memorandum (Transmittal B-01-28, April 19th, 2001) definitions of physician categories of supervision were set forth. The rules define three levels of supervision; General Supervision, Direct Supervision, and Personal Supervision. Program Memorandum (PM) sets forth revised levels of physician supervision required for diagnostic tests payable under the Medicare physician fee schedule. Section 410.32(b) of the Code of Federal Regulations, as adopted in the Medicare physician fee schedule final rule of October 31, 1997, requires that diagnostic tests covered under §1861(s)(3) of the Social Security Act and payable under the

physician fee schedule, with certain exceptions listed in the regulation, have to be performed under the supervision of an individual meeting the definition of a “physician”(§1861(r) of the Social Security Act) to be considered reasonable and necessary and, therefore, covered under Medicare.¹⁶ Of course, in that same memo and the rules and regulations an exception is Central Nervous System Assessments (payer codes: 96100, 96105, 96110, 96111, 96115, 96117) performed by a clinical psychologist and Diagnostic Tests performed in healthcare facilities by a clinical psychologist. Those exemptions are specific and long-standing, and in hospitals and residential care facilities psychotherapy provided by a psychologist must only be supervised by the Direct Supervision (ordered and directly supervised) physician rule. However, the recent summer of 2012 rule changes move all psychology services in hospitals, partial hospital programs, and residential care centers to the General Supervision (arms length and a medical director or indirect supervision recognizing their independent practitioner license). All Medical Staff Members practice in hospitals under General Supervision of the Medical Staff Director.

The regulation defines these levels of physician supervision for diagnostic tests as follows:

General supervision means the procedure is furnished under the physician’s overall direction and control, but the physician’s presence is not required during the performance of the procedure. Under general supervision, the training of the non-physician personnel who actually performs the diagnostic procedure and the maintenance of the necessary equipment and supplies are the continuing responsibility of the physician.

Direct supervision in the office setting means the physician must be present in the office suite and immediately available to furnish assistance and direction throughout the performance of the procedure. It does not mean that the physician must be present in the room when the procedure is performed.¹⁷

Removal of the requirement of Direct Supervision of psychological services made such services more accessible for patients and to receive the same quality of psychological care that would be available to them had they not been confined to hospital care. General supervision of psychological services including psychological testing allows the hospital to bill Medicare directly for quality psychological services. The expands psychological services for patients by allowing Medical Staff Members to order psychological testing for their patients without being physical present in the hospital when the service is provided. Prior to the change to General Supervision, hospitals with partial hospitalization programs (outpatient day treatment of 3-5 hours per day) had to require that the psychiatrist be on the premises in the suite where the therapies are delivered. This posed a recruitment problem for hospitals, a dual expense relative to the psychologists and social workers delivering group, individual, and family therapies. Under the Direct Supervision rule the nation was denied the more efficient and affordable Partial Hospitalization option. This limitation resulted in hospitals experiencing many more Emergency Room visits, as well as costly general hospital, and psychiatric hospital stays inflated health care costs. Additionally, many rural individuals with serious and persistent mental illness simply lost access to services and their health and the safety of their lives were jeopardized. This rule revision further strengthens psychology’s

claim to Medical Staff Membership and Privileging in hospitals. The General Supervision requirement increases the value of having psychologists on the Medical Staff and authorizing psychologists to admit, discharge, and write appropriate orders. Staff privileges for psychologists can be written even to order a specific physician collaborator and to assess and care for medical needs of patients they hospitalize. This gives hospitals the ability to use psychologists as behavioral health department heads under organizational General Supervision of an institutional Medical Director and outside of psychiatry. The facility can ensure that the Medical Director provides general facility supervision and helps psychologists set “qualifications and training requirements” for psychology staff privileges, required re-certifications and board certifications and continuing education, and required interface in various quality assurance and indirect supervision activities.

For rural hospitals, nursing homes, and partial hospitalization programs, this rule change gives these facilities the opportunity to use psychologists, often with more specific and appropriate diagnostic and programmatic supervision training and experience than psychiatrists to establish and improve the quality of care and specialty behavioral health and neuropsychological and medical psychology services in their facilities. Psychologists have established training criterion and specialty boards germane to practice in hospitals and health facilities.^{18,19} The new rules allow states more flexibility, more creativity and local adaptability of programs to meet healthcare needs in their state.

Psychologists are encouraged to start dialogues with hospital and healthcare facility administrators, CMS, and local hospital board members regarding the formal integration of expanded psychologist services. They must understand that administrators and general physicians may have little understanding concerning the training and legal scope of independent practice afforded psychologists by law. They may have very limited vision of what can be done for behavioral disorders, and for that matter the psychological aspects of physical disorders, outside medications and guidance. Even though doctors have medical training, they may have limited knowledge about the neuroplasticity and growth potential of the brain and mind.^{20,21} Other Medical doctors can use many of the materials referenced here to establish brief Medical Staff and facility Board educational presentations. The Medical Staff receives required Continuing Medical Education Credits provided by the hospital for attending luncheon meetings that outline opportunities to improve the quality of care in their facility. It is at these free CE meetings where much of the integration of healthcare takes place. Having psychologists on active staff can directly through CE training and indirectly through staff interactions improve the quality of care in these facilities. It will also provide medical staff and facilities with reduced liability as aftercare on an outpatient basis (partial hospitalization and outpatient behavioral healthcare) becomes more readily available. Such services assist the facilities with qualifying for meaningful use and linkages and continuum of care incentive pay and integrated care grants.²²

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To Integrate or Not to Integrate? The Future of Psychology Practice in the Era of Health Care Reform

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Abstract

Multidisciplinary, interdisciplinary, transdisciplinary, multispecialty, integrated, interrelated, interprofessional are current buzzwords for various models of collaborative care. These terms suggest the concept of teams of health care providers working together offering comprehensive, quality, affordable health care. Although these concepts may be desirable, there are barriers to their implementation in health care. Organized medicine is still a strong advocate of the 19th century Corporate Practice of Medicine Doctrine stating that physicians should make medical decisions autonomously. This presentation describes how psychologists in 22 States have overcome this barrier. The author describes an example of how a successful multidisciplinary practice has served community behavioral healthcare needs through professional collaboration.

Introduction

Multidisciplinary, interdisciplinary, transdisciplinary, multispecialty, integrated, interrelated, interprofessional, and collaboration describe models of behavioral healthcare to alleviate the shortages of medical services for the healthcare needs of the public.^{1,2} These terms suggest the concept of teams of healthcare providers working together offering comprehensive, quality, affordable health care. The idea is not new. “The concept of medicine as a single discipline concerned with only the restoration of individual health from the diseased state should be replaced by the concept of ‘health professions’ working in concert to maintain and increase the health of society as well as the individual.”³

APA published, “Core competencies for Interprofessional collaborative practice. This defines “interprofessional” or “Interprofessionalism” as, “The process by which professionals reflect on and develop ways of practicing that provides an integrated and cohesive answer to the needs of the client/family/population... It involves continuous interaction and knowledge sharing between professionals, organized to solve or explore a variety of education and care issues all while seeking to optimize the patient’s participation. Interprofessionalism requires a paradigm shift, since interprofessional practice has unique characteristics in terms of values, codes of conduct, and ways of working.”⁴

Barriers to Interprofessionalism

Although the need for collaborative approaches to health care delivery is clear, barriers exist which hinder implementation. One of the greatest barriers to accessing behavioral health services is the critical shortage of treatment capacity. Currently, 55% of US counties have no practicing psychologists, psychiatrists or social workers.⁵ Another

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barrier can be legislative. A remnant of the 19th century, the Corporate Practice of Medicine Doctrine holds that physicians should make medical decisions autonomously. The logic was that if businesses owned by non-physicians controlled the delivery of health care, health care could be decided based on a profit motive, rather than the best interests of the patient. The Doctrine prohibited “lesser licensed” providers from controlling or directing health care. This limitation is particularly onerous in an era of technological advances including electronic health records, computerization and the need for capital to grow a business. States vary in the application, requirements and limitations of the doctrine of the Corporate Practice of Medicine Doctrine. This Doctrine is costly for providers wanting to practice interprofessionally and to navigate this legal minefield. Violating the Doctrine can put providers at risk of running afoul of licensing laws. Twenty-two states currently allow differently licensed health care providers to form corporate entities, while five jurisdictions have some flexibility to do so. The remainder of the states do not allow these entities.⁶ Other barriers to interprofessional practice include: hierarchical attitudes, differential and declining reimbursement rates for similar services, lack of understanding of the advantages of interprofessional care, fear of change, risk aversion and the challenge of developing an entrepreneurial spirit. These challenges, coupled with psychologists having little formal business training, hinder the transition to interprofessional mental health care delivery. Innovation and inter-professional groups are the cutting edge of mental health care delivery of the future.

An APA Practice Survey of Practitioners with over 2500 respondents found fewer than 12% reported working in a group practice, while 49% indicated they were solo practitioners.⁷ Solo practitioners with established practices, or with niche practices, will likely continue to thrive as health care reform unfolds due to supply and demand and having an established referral base. Many other psychologists will move into groups that offer interprofessional practice opportunities, such as the Rainier Behavioral Health, PLLC.

The Group Practice Turnkey Model of Rainier Behavioral Health, PLLC is a thriving model of Interprofessional Practice. Rainier Behavioral Health, in Tacoma, WA was established in 1985 as an interprofessional mental health clinic. It currently provides approximately 18,000 patient visits yearly, with almost two thousand new cases each year. Due to existing Corporate Practice of Medicine Doctrine laws preventing a psychologist and psychiatrist from incorporating, the Rainier partnership had extensive liability exposure. In 1995 the Washington State Psychological Association, in partnership with allied health providers, lobbied successfully to repeal the Corporate Practice of Medicine Doctrine. Over the years, as the value of interprofessional care became acknowledged as an effective approach to mental health provision, the clinic evolved into its current complement of 17 therapists, including four physicians, a pediatric ARNP, eight psychologists and four social workers. The practice is incorporated as a Professional Limited Liability Company (PLLC).

Organizational Structure of Rainier Behavioral Health

There are eight full time and two part time support staff. Two full time support staff handles triage, insurance verification and authorization, and initial appointment scheduling. Front desk staff is responsible for patient check in, rescheduling, co-payment collection, phone calls, faxing, and file management. Billing support staff handle billing issues and insurance submission, while the part time bookkeeper manages accounts payable, payroll, tax filing, and benefit management. Therapist and support staff benefits include: health insurance, a flex benefit plan, retirement plan

access, life, disability and accidental death and dismemberment insurance, optional dental and vision coverage, and vacation and sick leave. The office manager handles prescription refills, supplies, equipment maintenance contracts, repairs and support staff management.

Employees are W-2 employees. The practice pays malpractice, a yearly continuing education allowance, social security, Medicare, unemployment and other mandated taxes, furniture, office supplies, Internet and telephone access, utilities, and maintenance. Our philosophy is that Rainier Associates hires well trained, quality therapists who can work as a team in providing excellent mental health care in an interprofessional environment. Our motto is: "Quality is Economy." Each therapist who joins the group automatically qualifies as a member of the insurance panel we contract with, as we have clinic status. Early career psychologists have an advantage in this regard as panels that might exclude them because of inexperience, or panel closure, include them as part of our group. Therapists are paid a percentage of what they collect, with more revenue yielding a higher percentage. There are flexible working hours, vacation periods and no micromanaging of time on site. While we hope that productivity will be high, and that therapists will work full time (defined as 20-25 weekly billable patient hours), we understand that life happens, and that productivity varies over the course of a therapist's career. Because we are a large group, when a therapist is out, we cover for each other, maintain referral, scheduling, billing, and continuity of care. Insurance companies only have to deal with one tax ID number, one point person for credentialing, and one payment to the group. Insurance companies are businesses too, and efficiencies of scale matter.

Group practices can provide a valuable and viable model for interprofessional practice. This article briefly describes Rainier Behavioral Health's turnkey model as an example. Rainier Behavioral Health doesn't have rigid controls on productivity, a competitive work environment, or the lowest overhead costs. What Rainier Behavioral Health offers, however, is a collegial interprofessional mental health clinic model that maximizes the therapists' skills and training. Therapists benefit from the larger scale of Rainier Health in both insurance collections and the added value of the support staff.

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