

Texas student stabs at least 14 at Lone Star College

In Texas, Youth Reported with Mental Health Problems Grows Substantially

Written by: [Staff](#) on Apr 8, 2013

In Texas juvenile detention facilities, the rate of mental illness now exceeds the rates of those affiliated with a gang. More than half the juveniles in Texas detention facilities in 2012 had mental health issues. Over the last three years, officials state the number of juvenile detainees with “intensive need” for mental health treatment has ballooned by 113 percent. The Texas Juvenile Justice Department’s director said last month that the percentage of mentally ill incarcerated youths spiked from 39 percent in 2007 to 56 percent in 2013, demonstrating that the problem of criminalizing mental health problems is not isolated to adult jails and prisons.

<http://thinkprogress.org/justice/2013/04/03/1806821/rate-of-mental-illness-exceeds-gang-membership-in-texas-juvenile-detention/?mobile=nc>

Dear OJJDP Administrator Robert Listenbee Jr,

Thank you for allowing our team to inform and demonstrate for the OJJDP and the United States Department of Justice on April 22, 2013, evidence based, integrated treatment recovery models that can reduce the risk of violence and suicide, even among the highest risk violent offenders with comorbid psychiatric disorders and chemical dependency.

The team's integrated treatment model includes 1) Anywhere, anytime, under 2 minute computerized adaptive screening and assessments for mental health (CAT-MH) 2) SAMHSA National Registry Best Practices Modified Adolescent Therapeutic Community (MATC) and the 3) FERPA and HIPAA Compliant Behavioral Health Data Portal (BHDP) with automated real time data collection/data reporting/data sharing/health surveillance.

Building desistance for violent offenders with mental disorders and chemical dependency is best served by shifting from a purely criminological approach to one that focuses on computer adaptive dynamic screening and assessment, trauma informed care and trauma specific treatments and interventions that promote recovery.

According to the 2012 Report of the Attorney General Holder's National Task Force on Children Exposed to Violence the majority of children and youth who are identified as having been exposed to violence never receive services or treatment that effectively help them to stabilize themselves and regain their normal developmental trajectory. Youth exposed to violence suffer from anxiety, depression and posttraumatic stress.

This first of three pre-webinar briefs contains research on how depression can lead to violence and how the CAT-MH can effectively screen (diagnose) and continuously assess for severity, high risk offenders for depression, anxiety, and bi-polar disorders and dispatch real time alerts for suicidal behaviors to clinicians, family members, first responders and correctional officers.

Depression is currently left undiagnosed, untreated and unmonitored in the juvenile and criminal justice systems despite being an acute precipitant of suicide, homicide, gun violence, and substance abuse. As many as 47% of youth in juvenile detention are affected by moderate-to-severe levels of depressive symptoms (Domalanta, Risser, Roberts, & Risser, 2003), Unrecognized and untreated depression potentially impacts the criminal course of juvenile offenders, as depression has been shown to be associated with increased recidivism (Clark-Jones, 1999; Cocozza, 1992; Whitbeck, Hoyt, & Bao, 2000). Offenders with depressive symptoms

are a highly vulnerable group, being at an extreme risk for violent behavior, drug and alcohol abuse, suicide and serious criminality (Capaldi, 1991, 1992; Cole & Carpentieri, 1990; McConaughy & Skiba, 1993; Rapp & Wodarski, 1997; Robinson, Jenson, & Yaffe, 1992). (See attached Depressive Symptoms Among Delinquent Youth)

Access to mental health professionals or primary care doctors skilled in diagnosing, treating, and continuously monitoring the severity of depression and anxiety in response to treatment/intervention is almost non-existent for juvenile offenders. Moreover research has shown that a wide range of short, fixed screening and assessment instruments for depression and anxiety such as the Patient Health Questionnaire (PHQ) that are validated on the general population cannot be assumed to have the same sensitivity and specificity for violent young offenders. (See attached Hewitt Perry Adams)

The Computerized Adaptive Test-Mental Health or CAT-MH, is currently a collection of three adaptive tests for depression, anxiety, and mania, and a diagnostic screening test for major depressive disorder (CAD-MDD) created by Dr Robert Gibbons and tested and validated by Dr. David Kupfer as part of a 5-year grant from the National Institute of Mental Health. The CAD-MDD produces a screening diagnosis of depression and a corresponding confidence level associated with that diagnosis. By contrast, the three computerized adaptive tests (CAT), the CAT-Depression Inventory or CAT-DI, the CAT-Anxiety or CAT-ANX and the CAT-bipolar disorder or CAT-BP, are dimensional measures that produce continuous severity scores based on symptomatology experienced in the past two weeks. (See attached Kupfer/Gibbons Bios).

The paradigm shift between traditional short fixed screening and assessment tools such as the PHQ-9 and those associated with the CAT-MH is that they begin with a large “bank” of items (1008 psychiatric symptom items) and adaptively administer a small and statistically optimal subset of the items (on average 12 items for each of the three CATs and 4 items for the CAD-MDD). Nevertheless, each of the CATs maintains a correlation of close to $r=0.95$ with the entire bank of items for each test (389 depression items, 431 anxiety items, 88 bipolar items). As a

comparison, the PHQ-9 used in these same subjects had similar specificity, but sensitivity of 0.70 indicating that for every 1000 true cases the PHQ-9 would miss 300, whereas the CAD-MDD would only miss 50. (See Time and Sensitivity)

As such, with only 12 items in 2 minutes over secure internet or intranet we can extract the information contained in hundreds of items in the item bank. In terms of our ability to screen for depression, the CAD-MDD has remarkably high sensitivity of 0.95 and specificity of 0.87 with an average of only 4 items (max=6 items). This advantage is achieved despite the fact that the CAD-MDD uses less than half the number of items. As part of the item bank, there are 14 suicide assessment items that may be adaptively administered as a part of the CAT-DI. This allows us to simultaneously screen for depression, anxiety, mania/hypomania, and suicide risk. (See Development of a Computerized Adaptive Test & CADD-MDD paper JCP)

The advantages of the CAT-MH include:

- Greatly increased sensitivity (fewer missed cases) with similar or even higher specificity (fewer false positives).***
- Easily adapt screening and assessment items so they are culturally sensitive and clinically appropriate for disproportionate minority and high risk for violence offender populations.***
- Dramatic reduction in patient and clinician burden.***
- Anywhere (jails or prisons) anytime (24x7x365) administration (under 2 minutes) automated and continuous scoring of the severity of depression, anxiety and bi-polar disorder over time in response to medication or MATC***

- ***Device independence (smart-phones, tablets, PCs).***
- ***Dramatic increase in precision and information content through the use of large item banks containing hundreds of items as compared to short fixed-length tests.***
- ***Elimination of response-set bias based on repeated administration of the same items over and over.***
- ***Continuous dynamic suicide risk screening with real-time FERPA & HIPAA compliant reporting for corrections officers, parole/probation officer notification.***
- ***Uncertainty estimates for severity scores which allow the determination of the amount of change that is statistically and clinically meaningful as well as confidence level associated with the screening diagnosis.***

I will send the briefs on the other two components, the MATC models and BHDP shortly

V/R

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Test Details - Depression

Severity Score: 77.4 severe

Precision: 5.0

Unique ID: OIF VET

Probability of MDD: 0.996

Start Time: 3/20/2013 2:26:48 PM

Percentile rank among MDD: 84.6

Duration: 1 minute, 25.52 seconds

Item	Response	Duration	Severity		Precision
1	4	4.28	65.5	moderate	10.4
2	4	7.16	72.5	moderate	9.2
3	4	10.00	74.3	moderate	8.1
4	4	3.85	74.7	moderate	7.3
5	4	4.23	75.4	severe	7.1

In the past 2 weeks, have you felt that life was not worth living?

1. Not at all
2. A little bit
3. Moderately
- > 4. Quite a bit
5. Extremely