DATE: November 13, 2004

TO: Andrew Goldberg
Project Officer
National Institute of Justice

FROM: Fred C. Osher, M.D.
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Center for Behavioral Health, Justice, and Public Policy
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SUBJECT: Final Technical Report
NIJ Grant #2001-IJ-CX-0030
"Validating a Brief Jail Mental Health Screen"

Attached to this memorandum is the Final Technical Report on NIJ Grant #2001-IJ-CX-0030 - "Validating a Brief Jail Mental Health Screen". We are grateful to the National Institute of Justice for affording the opportunity to investigate a new tool for screening mental illnesses in our jail population. With the overrepresentation of persons with mental illnesses in incarcerated settings, we believe this research will make an important contribution to their improved identification, and it turn, improved care.

Please feel free to contact me if you have additional questions or concerns.

Final Technical Report

NIJ Grant #2001-IJ-CX-0030

VALIDATING A BRIEF JAIL MENTAL HEALTH SCREEN

Abstract

Purpose of Project. The purpose of this project was to validate a jail mental health screening instrument that can be utilized by correctional classification staff to identify adult inmates during the booking phase that may require a more detailed mental health assessment. This research was conducted under the National Institute of Justice's *Office of Research and Evaluation 2001 Solicitation for Investigator-Initiated Research*.

Background: There has been a 250% increase in the size of the U.S. jail population since 1986. Epidemiologic data suggests that prevalence rates of persons with mental illnesses in jail are 3- 5 times higher then the general population. The risk of suicide is an especially significant problem, particularly among new detainees. Suicide rates among jail and prison populations are higher than among the general population. About one-third of all jail suicides occur within the first week in custody, underscoring the importance of early identification. In addition, jail administrators report that inmates with mental illnesses are significantly more difficult to manage resulting in increased jail cost. Early identification could allow improvement in classification and management strategies. Jails have a substantial legal obligation to provide health and mental health care for inmates, yet screening procedures across American jails are highly variable. Currently, there is no valid, practical, standardized tool available. The Referral Decision Scale (RDS) had been previously tested as a screening instrument but was found to have significant concerns related to its predictive validity. Building upon RDS studies, we developed a revised instrument called the Brief Jail Mental Health Screen (BJMHS).

Methods: BJMHS data were collected in four jails (2 in Maryland and 2 in New York) from 10,330 inmates at booking. A subset of 357 detainees was selected (125 Referrals (positives on screen; 74 males and 51 females) and 232 Non-referrals (negatives on screen; 137 males and 95 females)) and administered the Structured Clinical Instrument for DSM-IV (SCID) for standardized clinical cross-validation.

Results: The BJMHS takes an average of 2.5 minutes to administer. It correctly classified 73.5% of males, but only 61.6% of females based on SCID diagnoses. With suggested cut-off scores, the BJMHS identifies 11% of screened detainees for further mental health assessment.

Conclusions: The BJMHS is a practical, efficient tool for jail correction officer intake screening for male detainees. While an improvement over other screening instruments for all inmates, it has an unacceptably high false negative rate for female detainees.

Final Technical Report

NIJ Grant #2001-IJ-CX-0030

VALIDATING A BRIEF JAIL MENTAL HEALTH SCREEN

I. Purpose, Goals and Objectives

A. Purpose of Project. The purpose of this project was to validate a brief jail mental health screening package that can be utilized by correctional classification staff to identify adult inmates during the booking phase who may require a more detailed mental health assessment. The package includes two one-page tools: the Brief Jail Mental Health Screen (BJMHS), which flags individuals who exhibit signs and/or symptoms that may indicate severe mental illness (either schizophrenia spectrum disorders, major depression, or bipolar disorders), and the Suicide Prevention Guidelines Screen (SPGS), which identifies individuals who may be at risk for suicide or significant self-harm. We submitted this application under the National Institute of Justice's *Office of Research and Evaluation 2001 Solicitation for Investigator-Initiated Research*. This project was consistent with that solicitation's stated aim of sponsoring applied research that seeks to "…develop, validate and evaluate new technologies to deter crime and *enhance criminal justice operations*."

B. Project Goals and Objectives. The goals of this project were to test the validity of a brief jail mental health screening package in four county jails.

Our project objectives were:

- Utilize the screening package on a regular basis as part of the booking process in four county jails for a six-month period;
- Examine the distribution of scores on the Brief Jail Mental Health Screen and the Suicide Prevention Guidelines Screen for the screening sample as a whole and for demographic sub-groups (sex, race, age);
- Test the concurrent validity of the screening package against the Structured Clinical Interview for DSM-IV-R;
- Identify the optimal cut-point for the Brief Jail Mental Health Screen; and
- Develop instructions for administering the screen.

II. Statement of the Problem & Review of Literature

A. Severe Mental Illnesses and Acute Psychiatric Distress.

On June 30, 2002, 588,106 men and 77,369 women were incarcerated in approximately 3,300 local jails across the United States (Harrison PM, Karberg JC, 2003). This represents an increase of more than 250% over the jail population in 1986. Many jails operate at or above their capacity. As correctional staff struggle to keep up with this rapid influx of men and women while maintaining a secure environment, their efforts are increasingly impacted by the flow of individuals with serious mental illnesses who are entering these jails in growing numbers. A number of studies show that jail detainees exhibit a significantly higher prevalence of serious mental illnesses (e.g., bipolar disorders, major depression, schizophrenia spectrum disorders and other psychoses) than the general population (Jamelka et al., 1989; Teplin, 1991; Teplin, 1994). Based upon admissions to the Cook County Jail in Chicago, Teplin (1994) and Teplin et al., (1996) reported that approximately 6% of male inmates and 15% of female inmates displayed acute symptoms of schizophrenia, major depression, and/or bipolar disorder and required treatment. It is important to note that although women comprise a relatively smaller portion of the jail population, the prevalence of severe mental illness is higher among women inmates than among male inmates.

Because serious mental illnesses are chronic in nature, they are subject to exacerbation and relapse. The stress of incarceration can exacerbate symptoms in persons with pre-existing mental disorders, leading to acute psychiatric disturbances, including risk of harm to self or others. Individuals with histories of severe mental illnesses may be at particular risk for symptom exacerbation and relapse. Several studies have shown that inmates with psychiatric impairment may exhibit more serious and more numerous adjustment problems (greater perceived stress, more disciplinary problems such as refusal to leave one's cell, fire-setting, destruction of property, etc.) during incarceration than unimpaired inmates (Toch and Adams, 1986; Toch et al., 1989; McCorkle, 1995; Lindquist and Lindquist, 1997). This relationship has been found to apply more strongly among female inmates than among males (McCorkle, 1995; Lindquist and Lindquist, 1997). Untreated, these inmates may pose a significant danger to themselves, other inmates, and correctional personnel.

The risk of suicide is an especially significant problem, particularly among new detainees. Suicide rates among jail and prison populations are higher than among the general population. Leibling (1999) notes that about one-third of all prison suicides occur within the first week in custody, while other authors have underscored the importance of the first 24 hours

of incarceration (Hayes, 1983; Ivanoff, 1989; Winkler, 1992). While previous research has focused on male inmates (and being male has been noted as an important risk factor), Leibling (1994; 1999) argues that in fact, the suicide rate among women may be equally as high as among male inmates. However, cause of death for women inmates may be less likely to be ascribed to suicide. This finding underscores the importance of screening for suicide risk factors among women inmates as well as among men.

Jails have a substantial legal obligation to provide health (and mental health) care for inmates (Cohen and Dvoskin, 1992). Case law and statutes have not provided a clear definition of what constitutes "adequate" mental health care. However, the American Psychiatric Association (1989) has recommended that all jails provide at minimum: (1) mental health screening and evaluation, (2) crisis intervention and short-term treatment (most often medication), (3) access to inpatient services, and (4) discharge and pre-release planning. In a recent national survey of 1,706 American jails controlling for facility size through stratification, Steadman and Veysey (1997) reported that 83% of all US jails provided some form of initial screening for mental health treatment needs, 60.4% provided psychiatric evaluations, 72.7% provided suicide prevention, 41.9% provided medications, and 20.7% provided case management or pre-release planning services. However, screening procedures across American jails are highly variable. Screening may consist of anything from one or two questions regarding previous treatment through a detailed, structured mental status examination. One result of this variability is highlighted in a jail study reported by Linda Teplin (1990): about 7.4% of the jail detainees manifested severe mental disorders when processed into the jail, yet almost 63% of these inmates were missed by routine screening performed by jail staff and remained untreated. Clearly, there is a pressing need to develop valid and reliable procedures that can screen incoming detainees for signs and symptoms of acute psychiatric disturbance and disorder.

B. Detecting and Responding to Mental Illness in Jails.

Jails experience a rapid in-flow of individuals with a multitude of health, mental health, and substance abuse problems. The first task of correctional staff is to triage those who may be at significant risk for suicide, acute psychotic decompensation and/or medical/psychiatric complications from recent substance abuse from those who are experiencing varying degrees of distress more usually associated with arrest and detention (Ogloff et al., 1991). Effective mental health triage in the jail setting can be viewed as a three-stage process: (1) routine, systematic and universal mental health *screening* performed by correctional staff during the booking/classification process to identify those

inmates who may need closer monitoring and mental health assessment for a severe mental disorder; (2) a more in-depth *assessment* by trained mental health personnel conducted within 24 hours of a positive screen; and (3) a full-scale psychiatric *evaluation* when an inmate's degree of acute disturbances warrants this. Screening is a crucial part of this process, since it is the primary means by which jail staff can determine which inmates require more specialized mental health assessment or psychiatric evaluation, and treatment. Unless inmates are identified as *potentially* needing mental health treatment, they will not receive it.

Screening is the weak link in the delivery of mental health services in jails and prisons. The screening process varies considerably between jails as noted above, and there are no valid, standardized tools available that can be recommended for adoption across the country. What are the qualities and characteristics that a standardized screen would need to possess in order to merit widespread dissemination and adoption? A standard screen would need to be *brief*, because the corrections classification staff have only a limited amount of time to spend with any one inmate. It would need to incorporate *explicit decision criteria*, because the mental health training and experience of correctional staff is likely to be highly variable, and overall, relatively low. Correctional staff traditionally are confident in their ability to discern overtly psychotic symptoms, but considerably more uncertain about identifying less obvious but equally serious signs and symptoms. Thus, they look for a tool that can provide them with the basis for a clear decision ("refer or don't refer"). A useful jail-based mental health screen would also exhibit a low *false-negative* rate; that is, it would not miss many inmates who truly did have a serious mental disorder because the potential costs of not treating an inmate with an actual severe mental illness could be grave. On the other hand, it would also not have too high a *false-positive* rate, since mental health resources within a jail are likely to be scarce, and burdening trained mental health staff with the need to assess many people who do not have a severe mental illness is an inefficient use of their time. Thus, an effective mental health screening tool would have a *high degree of predictive validity*, in that most of the people who are flagged by it as 'positive' should, upon assessment, be found to have a treatable severe mental illness.

C. Development of the Referral Decision Scale.

There are few available screening tools that meet all of these criteria. Symptom checklists, like the Symptom Checklist-90 (SCL-90, Derogatis, 1977) and the Brief Symptom Inventory (Derogatis, 1993) focus on the recent self-rated experience of specific symptoms within the past week. One major drawback for the use of the BSI is its cost, which is currently more than one dollar per administration. Rating instruments like

the Brief Psychiatric Rating Scale (BPRS; Overall and Gorham, 1962) and the Schedule of Affective Disorders and Schizophrenia—Change Version (SADS-C; Spitzer and Endicott, 1978; Rogers et al., 1983; Rogers and Wettstein, 1985) require independent symptom ratings by a clinically trained interviewer. While they might be useful as part of an assessment, these instruments would not be practical for use as a screen by untrained correctional staff for whom time is of the essence.

One instrument that does hold promise for meeting the criteria we have outlined above is the Referral Decision Scale (RDS; Teplin and Swartz, 1989). The RDS was designed to serve as a rapidly administered and easily scored screening tool for use by correctional staff in identifying inmates who were likely to be suffering from schizophrenia, bipolar disorder, or major depression. As a screening tool, it was not developed to diagnose these disorders, nor was it intended to serve as a measure of the severity of dysfunction. Rather, the RDS was meant to flag signs and symptoms of gross impairment associated with each of the three disorders. It consisted of three sub-scales incorporating 14 items predictive of these disorders that were derived from the National Institute of Mental Health's Diagnostic Interview Schedule (DIS; Robins et al., 1981). Teplin and Swartz (1989) described in detail the discriminant analysis they conducted with data from administration of the DIS to a random sample of 728 male detainees in the Cook County Jail. The final published version of the RDS contained three sub-scales of five items each (the major depression and bipolar sub-scales shared a common item). Each of the three sub-scales contained a cut-off score that, if met or exceeded, should result in a referral for mental health assessment.

Teplin and Swartz (1989) provided preliminary evidence of the validity of the RDS compared with the parent instrument (DIS). They reported the average *sensitivity* of the three RDS sub-scales (how well they detect illness among those inmates who are truly ill) as .88, and their mean specificity as .99 when compared with the DIS-generated definitions for each disorder of ill versus non-ill. They offered additional support for the concurrent validity of the RDS using DIS data from a separate study involving 1,149 North Carolina prison inmates. Once again the three RDS sub-scales exhibited acceptable validity in comparison with the full DIS (average sensitivity of .79 and average specificity of .99).

While generally supportive of the RDS, several studies have raised questions about its content, concurrent and predictive validity. Hart et al., (1993) examined the validity of the RDS among a sample of 790 male pretrial detainees in Vancouver, British Columbia. The RDS was administered along with two other symptom-rating scales, the BPRS and the Diagnostic Profile. The full DIS was then administered separately. In this study, the RDS produced higher prevalence rates than either of the

other two scales. As evidence of its predictive validity, the RDS had positive and negative predictive values of .19 and .98 respectively relative to DIS diagnosis. Since these indices were similar to those calculated for the BPRS and the DP, they provide support for the convergent validity of the RDS.

Rogers et al. (1995) raised additional questions about the validity of the RDS as a screening instrument. The RDS was administered along with the Schedule of Affective Disorders and Schizophrenia (SADS) and the Personality Assessment Inventory (PAI) to a sample of 108 male jail detainees housed in a specialty unit for inmates with serious mental disorders in Fort Worth, Texas. Using the multi-trait/multi-method approach for demonstrating convergent and discriminant validity, Rogers and his colleagues found supportive evidence for the schizophrenia and major depression sub-scales, but not the bipolar mania scale. The average correlation coefficient among schizophrenia sub-scales was .29, and .42 among the depression sub-scales. By contrast, the average correlation coefficient among the bipolar mania sub-scales was only .19. Rogers and colleagues concluded that although the RDS may have merit as a gross screen for psychological impairment, it seemed poorly suited to the task of diagnosing individual detainees. (Note, however, that as a screening device, its purpose is not actually diagnosis; rather it serves as a 'red flag' prompting further assessment by a mental health worker.)

Finally, Veysey and associates (1998) challenged the validity of the RDS as a screening instrument on other grounds. Veysey and colleagues questioned the face validity of individual items (i.e., several items did not appear appropriate for use with incarcerated individuals), and the use of lifetime occurrence of symptoms rather than current symptoms may over-estimate the need for further mental health services in the resource-poor jail environment.

D. Development of the Jail Mental Health Screen.

Responding to the concerns noted in these previous studies, Veysey et al*. (unpublished manuscript*) recently revised the RDS to produce an even briefer and more practical tool for use in jails. These revisions led to our development of a newly reconceptualized instrument, called the Brief Jail Mental Health Screen. Because the RDS sub-scales do not perform well in discriminating among schizophrenia, bipolar disorders, and major depression, the scoring approach was changed to that of a single composite scale. Thus a positive score now indicates that an individual has recent or acute symptoms associated with any one or more of these three disorders. The total number of items was reduced from the original 14 to a smaller set of 8 items by eliminating items that had questionable content validity and did not contribute statistically to the

composite scale. Several items were rephrased to provide clearer wording. Finally, the time frame employed by the RDS was changed from lifetime occurrence to “currently”. Two additional questions ask if the inmate has ever been in a hospital for emotional or mental health problems and if they are currently taking any medication prescribed by a physician form any emotional or mental health problem.

Officer referral decisions are also explicitly defined and evolved over the grant period. Booking officers are instructed to refer to mental health for *immediate attention* anyone who scores positively on two or more current items, or either the hospitalization or medication item. In addition, any evidence of suicide risk should be referred for *immediate attention*.

Neither the RDS nor the BJMHS contains any systematic screening for risk of suicide. Fortunately, a standardized screen already exists that is enjoying widespread use. This one-page tool, the Suicide Prevention Guidelines Screen (1998) (SPGS), appears quite suitable for use with the BJMHS. Developed in New York State where its use is already a standard part of the booking process, the SPGS contains four sections: observations of the arresting officer, personal data, behavior and appearance, and criminal history. The one-page checklist normally takes less than five minutes to complete.

E. What We Needed To Learn About the BJMHS

While the Brief Jail Mental Health Screen clearly represents a step forward in the evolution of the Referral Decision Scale, important questions exist about its operation in a jail setting. Among these questions are the following. How well did the Brief Jail Mental Health Screen actually work with the Suicide Prevention Guidelines Screen? What is the concurrent validity of the Brief Jail Mental health Screen when compared with a ‘gold standard’ clinical interview, such as the Structured Clinical Interview for DSM-IV-R? How much does the use of these screens add to the workload of classification staff, and is this level acceptable to them? What should the optimal cut-point for the new composite scale be? Should the same cut-point be used for men and women inmates?

Previous studies with the RDS used its parent measure, the Diagnostic Interview Schedule (DIS), as the standard for its validation. We believed this is a weak test of the screen’s validity. A more compelling test would involve the use of a different structured clinical interview that would more naturally reflect the clinical assessment phase of the triage process. For that reason, we proposed to use as our ‘gold standard’ the Structured Clinical Interview for DSM-IV (SCID), a semi-structured interview requiring clinical judgement and a trained clinical interviewer

(First et al., 1996). The SCID covers all major Axis I (clinical) disorders as well as substance abuse. It uses a modular format with a skip-out strategy that allows the interviewer to move to a different section without completing the current one if diagnostic criteria for the current one are not met. The instrument is administered by a carefully trained clinician and typically takes between one and two hours to complete. We proposed to test the concurrent validity (the validity of the screen against an independent validated instrument) of the BJMHS against the SCID.

III. Methodology

Subjects

Participation in this study was voluntary. Informed consent forms were required and obtained for all SCID interview participants. Participants were informed that their decision to participate would not affect their stay in the jail. All human subjects procedures were approved by the Institutional Review Board (IRB) of the university or organization associated with each data collection site. Jail detainees in Maryland received $25 for their participation in the SCID interview. At the request of jail administrators in the New York facilities, detainees did not receive compensation for their participation in the SCID interviews. The overall refusal rate was 31%.

Participants included 11,438 male and female jail detainees admitted to one of four county jails located in Maryland (n=2) and New York (n=2) during May 2002 and January 2003. These participants were mostly pretrial detainees (68.9%), predominately male (86.9%), slightly over half were African American (57.6%) with an average age of 31.6 years (SD=10.4). All participants answered questions on two screening instruments upon admission to the jails. The two screening instruments were the Brief Jail Mental Health Screen (BJMHS) and the Suicide Prevention Screening Guidelines (SPSG). The screening data were used to identify a sub-sample of 357 detainees (approximately 90 from each jail) who were systematically selected within sampling subgroups for a detailed clinical assessment conducted by a trained research interviewer using the Structured Clinical Interview for DSM-IV (SCID). This sample was constructed so that there would be an adequate sample from each jail scored positively on the BJMHS (Referrals) and designed to comprise a large enough number of females to enable separate analysis by gender. Within the Non-referrals, a small number of persons who scored positively on the SPSG, but negative on the BJMHS were included. Participants in the final SCID sub-sample were 357 detainees that included 125 Referrals (74 males and 51 females) and 232 Non-referrals (137 males and 95 females). Very similar to the screened sample, these validation study

participants were mostly pretrial detainees (73.7%), slightly over half were male (58.9%), African American (51.1%) with an average age of 32 years (SD=11.1).

Training

Correctional Classification Officers.

Correctional Classification Officers in all four jails received training on administration of the BJMHS. This training, which took place in the jails, included a brief description of the research project and instructions on completing the BJMHS during the booking process.

Correctional Classification Officers in one of the Maryland jails and nursing staff in the other Maryland jail received training on administration of the SPSG. For the Correctional Classification Officers, this SPSG training was incorporated into the training for the BJMHS. For the nursing staff, the SPSG training included a brief description of the research project and instructions on completing the SPSG (immediately after the Correctional Classification Officers completed the BJMHS). Correctional Classification Officers in the New York jails did not receive training on administration of the SPSG because this instrument is already a standard part of the booking process in all New York State jails.

Clinical Research Interviewers.

Nine Clinical Research Interviewers were formally trained on administration of the SCID by a clinically trained SCID instructor. This two-day training included a description of the research project, information on conducting interviews in a jail setting, and instructions on completing and scoring the SCID. In addition, all of the Clinical Research Interviewers conducted practice interviews on acquaintances and on psychiatric patients who volunteered to participate in this aspect of the SCID training process. Reliability results, conducted with the nine interviewers and a trained SCID instructor, were very favorable with alpha= .964 when averaged across the two rated tapes.

IV. Analysis and Results

Of the 10,330 detainees with valid BJMHS screening data 1194 (11.6%) were referrals. Twice as many women (22.6%) as men (9.9%) were referred with the BJMHS.

We examined the presence of serious mental illnesses, as measured by the SCID, for the validation sample detainees (N=357) divided into Non-referrals (n=232) and Referrals (n=125) based on negative or positive scores on the BJMHS. The analysis examined the ability of the BJMHS to predict the presence of SMI on the SCID. The core research questions were whether the BJMHS met acceptable levels of validity when compared to "gold standard" SCID and whether the initial scoring method of the BJMHS could be improved upon. We did this by comparing the SCID results (yes/no for presence of SMI) with the predicted results from the BJMHS (yes/ no for referral), performing the analysis separately for men and women.

The presence of a diagnosis from the SCID with the BJMHS referral status is presented in Table 1 below. For these results, men were considered referred on the BJMHS if they answered yes to ever in a hospital for emotional problems or ever on medication for emotional problems or yes to at least two of the other six current symptoms.

Table 1

Predicted mental illness with the final Brief Jail Mental Health Screen by serious mental illness diagnosis on the SCID

		BJMHS Non-referral		BJMHS Referral		TOTAL
A. Males						
SCID Serious Mental Illness Diagnosis	**No**	117	85.4%	36	49.7%	153
	Yes	20	14.6%	38	51.3%	58
Total		137		74		211
SCID Serious Mental Illness Diagnosis	**No**	62	65.3%	23	45.1%	85
	Yes	33	34.7%	28	54.9%	61
Total		95		51		146

Males: Correctly classified= 155/211= 73.5%
Sensitivity= 65.5, Specificity=76.5
False Negatives=14.6% (N=20), False Positives= 48.6%
ROC area under the curve (c)=.710

Females: Correctly classified= 90/146=61.6%
Sensitivity= 45.9, Specificity=72.9
False Negatives=34.7% (N=33), False Positives= 45.1%
ROC area under the curve (c)=.594

These results would have referred 11% of screened individuals for follow-up assessment. For men, 73.5% were correctly classified with a false negative rate of 14.6% (20 cases). The results for women showed 61.6% correctly classified. A major issue arose, however, women with a false negative rate of 34.7% (33 cases).

We next examined the 20 false negatives among the males and 33 false negatives among the women to see if there were any patterns to their characteristics or symptoms. Two of the 20 male cases and six of the 33 female cases were missed by focusing solely on current symptoms as opposed to lifetime symptoms. Another five of the 20 male cases and four of the 33 female cases would have been referred based on data from the SPSG. These individuals endorsed symptoms not present on the BJMHS, but indicative of needing further mental health evaluation. The remaining cases (13 males and 20 females) were not referred by either screen. The most frequent SCID diagnosis for the missed cases was major depression (N=13 males and N=23 females).

There was an issue with the consistent reporting of symptoms. All of the questions asked on the BJMHS were repeated during the SCID interview. They were either part of the SCID or added for this research study. In all but seven of the false negative cases, the inmates reported different information to the SCID interviewer than they had to the correctional officer. Had they reported the SCID information on the BJMHS, they would have been classified as referrals and only one male case and 6 female cases would have still been missed. This missed male case, which would have screened in using the additional information provided by the SPSG, was listed as guarded and difficult to interview by the SCID interviewer. The missed female cases all showed at least one symptom as reported in the later SCID interviews but didn't reach the threshold of currently symptoms to be classified as a referral.

Discussion

Based on these data, we believe the final BJMHS is a powerful tool for screening men booked into U.S. jails. It is simple to use for intake booking officers requiring only modest training. It is 74% accurate. Is this enough? "Enough" is obviously a relative term. Referring 11% of all inmates for subsequent mental health assessment must be factored in to existing jail resources and processes. Based on correction officer feedback, the percentage of male detainees with current acute symptoms missed, 14.6%, could be reduced dramatically by additional training of the correctional staff to effectively administer the BJMHS. It might also be possible to use a computer-assisted version of the screening questions which might reduce symptom underreporting to the correctional officers. Of course, any successful use of the BJMHS depends upon the screener and the detainees sharing language in common.

We believe that with approximately 10,000,000 males booked into U.S. jails annually and with 63% of those with mental illness currently being missed (8), the BJMHS would be a substantial improvement that

can be absorbed into the resource-strapped jail operations. Early identification can facilitate critical treatment interventions and mitigate some of the disruptive behavior associated with detainees with mental illnesses. It is only the first-step response. Opportunities for mental health identification and referral after booking are critical. It is by subsequent observation in housing units, cafeterias, recreation yards and clinics and input from community-based clinicians and family members that the inmates missed by the BJMHS must be identified and addressed. Nonetheless, the BJMHS represents a thoroughly researched initial screening instrument that can be recommended for all male detainees.

The BJMHS does not nearly as effectively correctly identify women. Where we fell short in our research was in the application of the BJMHS to women. We would miss about one-third of currently symptomatic women and 45% of those identified for referral would prove not to have a current serious diagnosis. While this is much less efficient than for men, a 34.7% false negative rate is substantially better than the overall 63% rate of missed true positives found by Teplin. So, to have identified correctly 45.9% of the true positives (28/61) among the women is a modest improvement over current practices, it still leaves much wanting. This may be due to the fact that the BJMHS does not measure symptoms of anxiety that are associated with the high incidence of post traumatic stress disorders experienced by female detainees (25). We recommend that subsequent modifications to the BJMHS for women add questions that capture anxiety symptoms. It may also be that women are less likely to disclose symptoms to correctional officers, who are most often male, upon intake. Whatever the explanation, research is needed to create an appropriate jail intake screen for women. In the meantime, U.S. jails can consider introducing the BJMHS as a cost-effective tool for intake screening for male detainees.

BRIEF JAIL MENTAL HEALTH SCREEN

Section 1 (Optional)

Date: ___ ___ / ___ ___ / ___ ___ ___ ___	**Time:** _____ AM PM	**Detainee #:** _____	**Gender:** □ M □ F
Date of Birth: ___ ___ / ___ ___ / ___ ___ ___ ___	**Admission Status:** □ Pretrial □ Parole Violation □ Sentenced □ Probation Violation		
Race/Ethnicity (check ALL that apply): □ American Indian or Alaskan Native □ Asian □ Black or African American □ Native Hawaiian or Pacific Islander □ Spanish, Hispanic, or Latino □ White or Caucasian □ Other (specify): _____			

Section 2

Right now…	**No**	**Yes**	**General Comments**
1. Do you currently believe that someone can control your mind by putting thoughts into your head or taking thoughts out of your head?			
2. Do you currently feel that other people know your thoughts and can read your mind?			
3. Have you currently lost or gained as much as two pounds a week for several weeks without even trying?			
4. Have you or your family or friends noticed that you are currently much more active than you usually are?			
5. Do you currently feel like you have to talk or move more slowly than you usually do?			
6. Have there currently been a few weeks when you felt like you were useless or sinful?			

	No	**Yes**	
7. Have you *ever* been in a hospital for emotional or mental health problems?			
8. Are you currently taking any medication prescribed for you by a physician for any emotional or mental health problems?			

Section 3 (Optional)

Officer's Comments/Impressions (check ALL that apply):

□ Language barrier □ Under the influence of drugs/alcohol □ Non-cooperative

□ Difficulty understanding questions □ Other, specify: _____

Instructions for referral: If yes to item 7 OR yes to item 8 OR yes to two or more of items 1 through 6 this inmate should be referred for further evaluation of mental health symptoms.

INSTRUCTIONS FOR COMPLETING THE BRIEF JAIL MENTAL HEALTH SCREEN

GENERAL INFORMATION:

This Brief Jail Mental Health Screen is being used for research purposes. The goal of this research is to develop an efficient mental health screen that will aid in the early identification of severe mental illnesses and other acute psychiatric problems during the intake process.

This screen should be administered by Correctional Officers during the jail's intake/booking process.

INSTRUCTIONS FOR SECTION 1:

DATE:	Enter today's month, day, and year.
TIME:	Enter the current time and circle AM or PM.
DETAINEE #:	Enter detainee number.
GENDER:	Check **M** for Male or **F** for Female.
DATE OF BIRTH:	Enter detainee's date of birth in month, day, and year.
ADMISSION STATUS:	Check appropriate custodial status.
RACE/ETHNICITY: one box.	Check all categories that apply. Please note that in most cases, you will only need to check
	However, there may be cases where an individual could be classified as Hispanic in terms of ethnicity and White/Caucasian in terms of race. In such a case it would be appropriate to check Hispanic and White/Caucasian.

INSTRUCTIONS FOR SECTION 2:

ITEMS 1-6:

Place a check mark in the appropriate column (for "NO" or "YES" response).
If the detainee REFUSES to answer the question or says that he/she DOES NOT KNOW the answer to the question, do not check "NO" or "YES". Instead, in the General Comments section, indicate REFUSED or DON'T KNOW and include information explaining why the detainee did not answer the question.

ITEMS 7-8:

ITEM 7: Include any stay of one night or longer. Do NOT include contact with an Emergency Room if it did not lead to an admission to the hospital.
ITEM 8:This refers to any *prescribed* medication for any emotional or mental health problems.

If the detainee REFUSES to answer the question or says that he/she DOES NOT KNOW the answer to the question, do not check "NO" or "YES". Instead, in the General Comments section, indicate REFUSED or DON'T KNOW and include information explaining why the detainee did not answer the question.

General Comments Column:

As indicated above, if the detainee REFUSES to answer the question or says that he/she DOES NOT KNOW the answer to the question, do not check "NO" or "YES". Instead, in the General Comments section, indicate REFUSED or DON'T KNOW and include information explaining why the detainee did not answer the question.

All "YES" responses require a note in the General Comments section to document:
(1) Information about the detainee that the officer feels relevant and important
(2) Information specifically requested in question

INSTRUCTIONS FOR SECTION 3:

OFFICER'S COMMENTS: Check any one or more of the four problems listed if applicable to this screening. If any other problems occurred, please check OTHER, and note what it was.

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