

University of Massachusetts Medical School

eScholarship@UMMS

Implementation Science and Practice Advances
Research Center Publications

Psychiatry

2008-2

Mental Health Screening: Pennsylvania's Experience In Juvenile Detention

Valerie Williams

University of Massachusetts Medical School

Et al.

Let us know how access to this document benefits you.

Follow this and additional works at: https://escholarship.umassmed.edu/psych_cmhsr



Part of the [Health Services Research Commons](#), [Psychiatric and Mental Health Commons](#), [Psychiatry Commons](#), and the [Psychiatry and Psychology Commons](#)

Repository Citation

Williams V, Grisso T, Valentine M, Remsburg N. (2008). Mental Health Screening: Pennsylvania's Experience In Juvenile Detention. Implementation Science and Practice Advances Research Center Publications. Retrieved from https://escholarship.umassmed.edu/psych_cmhsr/380

This material is brought to you by eScholarship@UMMS. It has been accepted for inclusion in Implementation Science and Practice Advances Research Center Publications by an authorized administrator of eScholarship@UMMS. For more information, please contact Lisa.Palmer@umassmed.edu.

Mental Health Screening: Pennsylvania's Experience In Juvenile Detention

By Valerie Williams, Thomas Grisso,
Melissa Valentine and Nicole Remsburg

Imagine working in a juvenile detention center where more than half the youths receive multiple psychotropic medications without the full-time supervision of a psychiatrist or registered nurse with a specialty in mental health. Imagine that Jane has been residing at the center for more than 40 days. She self-injures and has a history of being, and is currently, assaultive toward peers and staff. She is also pregnant, and her behaviors are endangering her unborn child.

Now imagine Joe, an 18-year-old, 6-foot, 200-pound male who has also been at the center for more than 40 days. He has a long history of assaultive behaviors. In addition, he was traumatized by his biological parents. After learning of the plan to return him to his original jurisdiction, he has become physically violent and requires multiple restraints. Now imagine having to meet the acute needs of both of these youths while also addressing the needs of many other youths with mental health problems and managing the behaviors of the facility's solely delinquent youths. There is no need to suppose these scenarios because these events like these happen daily and have for quite some time in juvenile detention centers across the nation.

In 2000, the Juvenile Detention Centers Association of Pennsylvania, with funding from the Pennsylvania Commission on Crime and Delinquency, initiated a project to examine the mental health needs of detained youths. The project

sought to identify youths with mental and emotional needs who may require immediate attention to decrease potential crises. It also collected aggregate data to assess the prevalence of detained youths with mental health needs. From situations similar to the ones presented, Pennsylvania's detention administrators knew that a high percentage of youths with mental health needs were entering detention, but they had no data to support their viewpoint. It was initially thought that a screening tool would need to be developed to measure youths' emotional and mental distress. The Massachusetts Youth Screening Instrument, Version 2 (MAYSI-2)¹ subsequently was selected as Pennsylvania's screening tool because of its established validity, ease of use and the limited costs associated with its implementation. It was piloted in 10 sites and throughout the years has been such a success that 20 of Pennsylvania's 22 juvenile detention centers currently are using the instrument. As funding for the project came to a close in 2006, two major investigations occurred: a detailed prevalence study and an evaluative component that focused on assessing the impact of routine MAYSI-2 mental health screening as perceived by juvenile detention staff and identifying any changes in behavior-management practices within centers after implementation of screening.² The following describes the purpose of mental health screening and Pennsylvania's findings.

What Is Mental Health Screening?

Mental health screening is a brief process administered by nonclinical staff using a standardized tool. It is a triage process that is carried out with every youth soon after intake in pretrial detention, during an initial probation intake interview or upon entrance into juvenile justice placement. The purpose of mental health screening is to identify youths whose mental or emotional conditions suggest that they might have a mental disorder, suicide ideation or present a risk of harm to others in the immediate future. The term “screened in” is used to refer to youths who are identified by the screening method as needing further attention. When youths are screened in for possible mental and emotional problems, it does not necessarily mean that they have mental disorders or that they are suicidal or likely to harm others. It indicates the need for a follow-up response by staff. Often, this involves obtaining further evaluation to determine whether mental disorders or suicide and aggression risks actually exist or to engage in precautionary interventions.

What Is MAYSI-2?

MAYSI-2 is a 52-item, self-report, yes-no instrument that was administered in Pennsylvania detention centers by means of computer software. It has six clinical scales identifying thoughts, feelings or behaviors (experienced in the past few months) that often are signs of a youth’s mental or emotional distress. They include: alcohol/drug use (frequency and extent of use), angry-irritable (feelings of anger and resentment), depressed-anxious (feelings of depression or anxiety), somatic complaints (bodily sensations often associated with anxiety), suicide ideation (thoughts of self-harm) and thought disturbance (unusual ideas and visual/auditory experiences). A seventh scale, traumatic experiences, provides information about a youth’s exposure to potentially traumatizing and stressful experiences.

MAYSI-2 does not provide psychiatric diagnoses. The primary purpose of MAYSI-2 is to screen in a pool of youths whose self-reported mental or emotional conditions require further attention (e.g., a clinical assessment). In order to determine a level that would be considered high enough to warrant a response, research during the development of the MAYSI-2 identified two types of cut-off scores that vary with each scale. Youths who are above the “caution” cut-off on a scale have scored in the “clinically significant” range and should be considered for some further response to their condition. Youths scoring above the “warning” cut-off have endorsed items at a level that places them in the highest 10 percent of youths in juvenile justice facilities, and these represent the most urgent need for some response. When the Pennsylvania detention centers started using MAYSI-2, it was determined, through the guidance of experts and stakeholders, that youths who scored in the caution range on the suicide ideation scale and/or scored in the warning range on two or more scales would be screened in and receive follow-up per center policies and procedures. Each detention center created a protocol for screening and subsequent follow-up based on its available resources.

What Did Pennsylvania Find?

Prevalence study. Elizabeth Cauffman, the project’s consulting psychologist, conducted the prevalence component of the study using MAYSI-2 data derived from 22,516 cases from 18 of the detention centers in Pennsylvania. These are cases, not youths — some youths reentering detention centers could contribute multiple MAYSI-2 scores. Of these cases, approximately 82 percent were male. Black and white races/ethnicities constituted the majority (45 percent and 40 percent, respectively, for males; 38 percent and 48 percent, respectively, for females), with Hispanic youths making up approximately 10 percent of the screened population. Most detained youths were between 16 and 17 years old (mean age 15.7 years). Approximately 8 percent were 13 years old and younger, and an additional 7 percent were 18 years old and older. Figure 1 presents the proportion of youths scoring above cut-off scores on all MAYSI-2 scales.

Figure 1. Proportion of Youths Scoring Above Cut-Off Scores on MAYSI-2 Scales

Scales	Percent Above Caution*	Percent Above Warning
Alcohol/Drug use	34	9
Angry-Irritable	42	13
Depressed-Anxious	38	11
Somatic complaints	46	8
Suicide ideation	20	14
Thought disturbance	37	13
Traumatic experiences**	28	12

* Percent above caution includes percent above warning (i.e., cases between the caution and warning cut-off, plus cases above the warning cut-off).

** The MAYSI-2 does not formally offer cut-off scores for traumatic experiences, but cut-offs were established by consulting psychologist Elizabeth Cauffman for use in Pennsylvania.

A summary of the findings is as follows:

- Almost three in four cases scored higher than the caution cut-off (clinically significant) on one or more of the MAYSI-2 scales;
- Almost one in three cases scored higher than the warning cut-off on one or more MAYSI-2 scales;
- Twenty percent of youths scored above the caution cut-off on the suicide ideation scale, and 15 percent of youths scored above the warning cut-off on two or more scales, with 24 percent of youths meeting one or both of these screened-in criteria;
- The proportion of girls who exceed the caution cut-offs was greater than for boys on all MAYSI-2 scales except alcohol/drug use (on which they were about equal); and
- Hispanic and non-Hispanic white youths reported clinically significant distress on the MAYSI-2 more often than black youths.

These results validated detention administrators’ perceptions and showed that a significant percentage of youths with mental health needs were entering Pennsylvania’s detention centers at alarming rates. These results also indicated that Pennsylvania was on par with national rates.

Perceived impact of routine MAYSI-2 screening. At the outset of the project, it was obvious that implementing mental health screening was in the best interest of the youths. However, there were concerns about staff resources and the time it takes to screen all youths. There was also a perceived increase in liability for staff identifying youths and a lack of resources to respond to youth needs. Because of these concerns, gathering information from detention staff regarding their perceptions of the impact of routine MAYSI-2 mental health screening on youth care and center operations was a primary objective. This information was collected using semistructured interviews and focus group sessions with administrators, managers and front-line staff about their perceptions of the values and limits of MAYSI-2 screening. Four main categories of change emerged from the data and are presented below with example quotes that illustrate the theme of each finding:

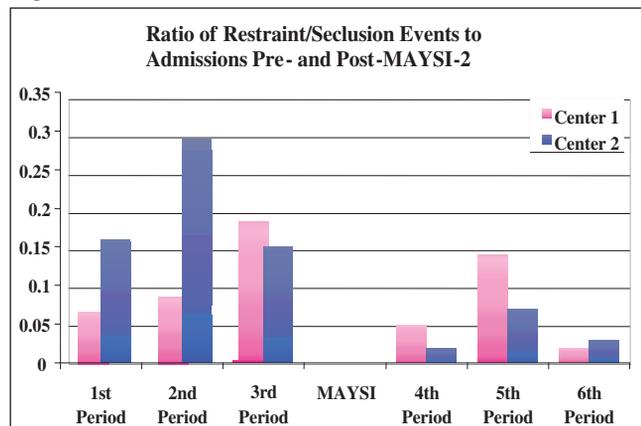
- *Improved staff perceptions of mental disorders among youths.* There was a general agreement that MAYSI-2 use had, in various ways, increased staff awareness of the relevance of mental health problems and helped them understand youth behaviors. In turn, it also seemed to have assisted staff in adjusting their own responses to these behaviors. “We noticed changes in staff attitude ... Now staff view kids not as a problem but as a person with behavior problems.”
- *Better communication with youths.* Staff reported that MAYSI-2 screening had a positive influence on staff and youth interactions. “Kids that were never detained before don’t know that staff are there to help them until they see the questions on the MAYSI and see that it’s OK to talk about these issues that happened. In the outside world, all of this has been hush-hush.”
- *Acquisition of resources.* Many detention centers were able to successfully use the data as a rationale for obtaining increased access to mental health services within the detention center. “We got a walk-in crisis center and a mobile unit in part because of the MAYSI results we were able to report.” Another response was: “We ended up getting a part-time mental health caseworker position as a result of using the MAYSI.”
- *Increased efficiency.* Administrators and staff often commented that the MAYSI-2 routine had a positive impact on a number of process variables during detention. These included a decrease in “chaos” associated with the intake process and greater efficiency and speed in acquiring assessments after screening. “I’d describe the center as chaotic before using the MAYSI.” Another participant responded: “I think the most profound effect [of the MAYSI] has been on mental health providers. Kids get to them now.”

As can be seen, mental health screening has had a pronounced impact not only on identifying youths but also on staff communications and center operations, including the acquisition of critical resources to meet the needs of these youths. In a time of staff turnover leading to mandatory overtime, less-than-desirable pay and often-dangerous working

conditions, any tool to help staff interact with youths is a welcome resource.

Identifying changes in behavior-management practices. To assess changes in behavior-management practices within detention centers after implementation of MAYSI-2 screening, a set of measurable factors (restraints and seclusions, peer-on-peer assaults by youths, and placements on watch) were identified that reflected youths’ behaviors and the staff’s need for implementation of responses to manage these behaviors. Two detention centers provided data on the identified factors (as well as the number of youths admitted monthly and other demographic variables) for four to six months prior to MAYSI-2 implementation (“pre-MAYSI”) and for at least six months after the MAYSI-2 was implemented (“post-MAYSI”), excluding the first month of implementation. The first center was in a large urban county, and the second was in a rural county. Data from the first center were obtained from archives, since the center had implemented the MAYSI-2 four years prior to the period of this study. Data from the second center were obtained during the study period, allowing for pre-MAYSI recording followed by MAYSI-2 implementation and post-MAYSI recording. All figures were adjusted for the number of admissions to detention during the reporting period. For both detention centers, restraint and seclusion events decreased. Compared with pre-MAYSI figures, the average monthly frequency of restraints/seclusions after use of the MAYSI-2 was 42 percent less in the first center and 80 percent less in the second (see Figure 2).

Figure 2



Some factors were reported by the first (larger) detention center but were not obtained or were not feasible to examine for the second (smaller) detention center. For the larger detention center:

- Frequency of recorded peer-on-peer assaults in detention was lower in every post-MAYSI month than in every pre-MAYSI month. Compared with pre-MAYSI figures, the average monthly frequency of peer-on-peer assaults after use of the MAYSI-2 decreased a remarkable 87 percent (see Figure 3).
- Frequency of suicide watches increased. The average monthly frequency after use of the MAYSI-2 was 20 percent higher than pre-MAYSI.

- Frequency of watches due to behavioral issues decreased. The average monthly frequency after use of the MAYSI-2 was 66 percent lower than pre-MAYSI. It was lower in every post-MAYSI month than in every pre-MAYSI month (see Figure 4).

juvenile facilities across the country. Lessons learned from Pennsylvania's implementation will continue to serve as a guide for other states.

ENDNOTES

¹ Grisso, T. and R. Barnum. 2006. *Massachusetts youth screening instrument, version 2 (MAYSI-2): User's manual and technical report*. Sarasota, Fla.: Professional Resource Press.

² Grisso, T. and V. Williams. 2006. *What do we know about the mental health needs of Pennsylvania's youth in juvenile detention? Findings and recommendations from the Mental Health Assessment of Youth in Detention Project*. Harrisburg, Pa.: Juvenile Detention Centers Association of Pennsylvania.

Valerie Williams, MA, MS, is a research instructor of psychiatry for the University of Massachusetts Medical School Law and Psychiatry Program. Thomas Grisso, Ph.D., is a professor of psychiatry and director of the University of Massachusetts Medical School Law and Psychiatry Program. Melissa Valentine, MSW, LSW, is deputy director and Nicole Remsburg, M.Ed., is executive director of the Juvenile Detention Centers Association of Pennsylvania.

Figure 3

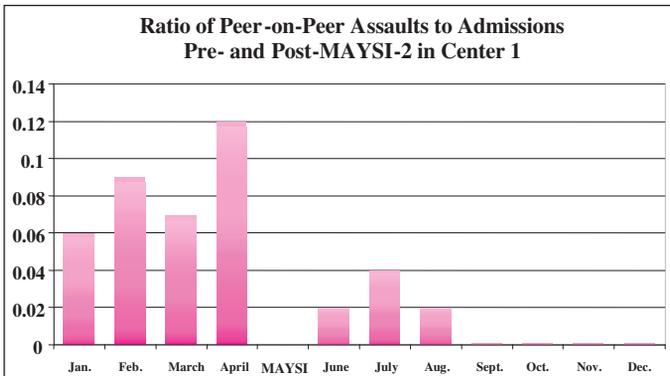
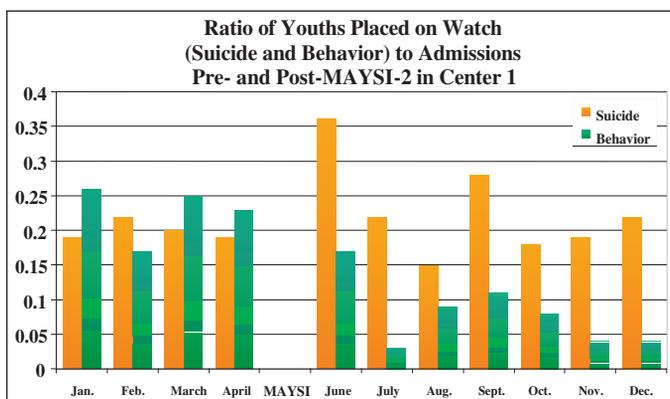


Figure 4



Setting the Stage

Why might mental health screening have an impact on these factors? It is possible that enhanced knowledge of youths' thoughts, feelings and symptoms soon after they are admitted to detention might allow staff to be better prepared to prevent self-harm, aggression and "incidents" before they occur. In addition, it could be that staff members' greater awareness of youths' mental health problems might alter their own responses to youths, resulting in greater sensitivity to youths' needs. Finally, it is possible that youths might respond positively to being asked about their needs, thus seeing staff as less threatening.

Although this data is limited, it is reasonable to presume that the MAYSI-2 — although not "the reason" for the pre to post changes — played a role in a broader mental health initiative with positive effects. Pennsylvania's detention centers continue to expand upon mental health screening by developing innovative means to appropriately respond to the youths they serve. When Pennsylvania introduced the MAYSI-2 into juvenile detention facilities in 2000, it was the first state in the nation to do so, setting the stage for profound improvements in mental health screening in