



**Baltimore City REP/PI Window Replication Project  
Focus on Mental Health Issues of Men in Detention**

**Brief Report to the Division of Pretrial Detention and Services  
Department of Public Safety and Correctional Services  
Baltimore City, MD**

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WINDOW REPLICATION PROJECT

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## **Detainee Mental Health – Introduction**

The purpose of this brief report is to provide additional in-depth analysis of the self-reported mental health picture of the 200 detainees in Baltimore City Detention Center who completed Window Replication survey.<sup>1</sup> This report includes a scope of the problem, use of psychotropic medication, the relationship between mental health and criminal behavior and the relationship between mental health, self-efficacy and housing.

### *Scope of the Problem*

The mental health of offenders in BCD is bleak. Of the 171 men who completed this question on the survey, 72 reported having been diagnosed by a doctor with one or more mental health issues in their lifetime (Table 1). Overall, 81% of the men had been diagnosed with depression, 44% diagnosed as bipolar disorder, 22% anxiety, 15% PTSD, and 8% with Schizophrenia. While 37 of the 72 men (or 51%) report only one mental health condition, the remaining 49% report two or more conditions. (Please note that we did not ask *when* the men were diagnosed – thus this is a self-reported lifetime measure of mental health.) Of the 72 detainees who had been diagnosed with a mental health condition, 54% were on medication for a mental health illness. In addition, among these 72 men with a declared mental health issue, 26 (or 36%) advised they wanted mental health services upon release, and 10 of those 26 (38%) stated that mental health care was one of their top priorities upon release.<sup>2</sup>

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<sup>1</sup> Please refer to the *Baltimore City REP/PI Window Replication Project Preliminary Analysis of Survey Results Report to the Division of Pretrial Detention and Services Department of Public Safety and Correctional Services Baltimore City, MD* dated October 2009 for study methodology.

<sup>2</sup> A two-part question in the survey provides data on these issues (see Appendix A). The question provides a list of possible services (e.g., housing, food, education, mental health services, drug treatment) and respondents are asked to select all of the services they feel would be useful, then they are asked to rank order their top 5 priorities.

**Table 1: Mental Health Status**

<b>Mental Health Condition*</b>	<i>N</i>	<i>Freq</i>	<i>%</i>
Number Report Ever Diagnosed with a Mental Health Issue	171	72	42%
<b>Of The 72 Diagnosed with Mental Issue...*</b>	<b>Percent Diagnosed</b>		
Depression		81%	
Anxiety		22%	
Bipolar		44%	
Schizophrenia		8%	
PTSD		15%	
Other (Anger Issues, ADHD)		6%	
<b>Number of Mental Health Diagnoses Reported</b>	<i>N</i>	<i>Freq</i>	<i>%</i>
1 Condition	72	37	51%
2 Conditions		23	32%
3 Conditions		6	8%
4 Conditions		4	6%
5 Conditions		2	3%
<b>Of The 72 Diagnosed with Mental Issues ...</b>	<i>N</i>	<i>Freq</i>	<i>%</i>
Those on Medication for Emotional or Mental Condition	67	36	54%
Number Stated Mental Health Care Useful upon Release	72	26	36%
<b>Of the 26 Who Stated Mental Health Useful ...</b>			
Number Identified Mental Health Care As Top 5 Priority	26	10	38%

\*Respondents select "All that apply"

*Exploring Number of Mental Health Diagnoses and Medication*

The next step was to categorize the 72 men who said they had been diagnosed with a mental health issue in their lifetime by the number (ranging from 1 to 5) of diagnoses and by one or more of the mental health issues: Depression, bipolar, schizophrenia, anxiety, PTSD and "Other" (of which had 2 ADHD and 1 said "Anger"). In examining these data, it became clear that these conditions tend to pattern, as indicated below. Note that each of the 72 men discussed represents unique people, as each person is categorized exclusively into one of the following categories:

- 37 men report 1 mental health (MH) diagnoses - of which 23 report depression, 10 bipolar, 1 schizophrenia, 1 anxiety, and 2 PTSD;
- 23 men report 2 MH diagnoses - 100% of them (all 23) report depression, then they are also diagnosed with the following: 11 with Bipolar; 5 Anxiety, 2 schizophrenia, 3 PTSD, and 2 other (1 ADHD, 1 Anger);
- 6 men were diagnosed with 3 conditions - 100% of them (all 6) have been diagnosed with both depression and Anxiety, and are also diagnosed as follows: 5 with bipolar, 1 other (ADHD);
- 4 men diagnosed with 4 conditions – and all 4 (100%) of them were diagnosed with Depression, Bipolar and PTSD. Then the fourth condition for these men broken down into 2 were diagnosed with Schizophrenia and 2 with Anxiety;
- Finally, 2 men had been diagnosed with 5 conditions – both had been diagnosed with depression, bipolar, anxiety, and PTSD, and then 1 was also diagnosed with schizophrenia and 1 was diagnosed with “other” but was left unidentified.

To summarize, 37 men report one diagnosis, and of the 23 men with 2 mental health diagnoses, all stated they had been diagnosed with depression. Of the 6 men with 3 diagnoses, all had been diagnosed with both depression and anxiety. Of the 4 men with 4 conditions, all had depression, bipolar, and PTSD. Finally, both of the men with 5 conditions had been diagnosed with depression, bipolar, PTSD and anxiety.

The data was further explored to observe which of these men were receiving medications (respondents were asked if they were taking medications for "any mental health or emotional illness") and if this was related to the number of lifetime mental diagnoses. As noted above, 36 of the 72 were on medications at the time of the survey. There was missing data on 5 of the

72 men with a mental health diagnosis, so the following information is based on survey results of 67 of the 72 men with a self-reported diagnosis.

- Of the 35 men with 1 MH condition - 14 are on medications (40%), 21 are not (60%)
- Of the 23 men with 2 MH conditions - 16 are on medications (70%), 7 are not (30%)
- Of the 6 men with 3 MH conditions - 3 on medications (50%), 3 are not (50%)
- Of the 4 men with 4 MH conditions, only 1 reported whether or not he was taking medications, and he is on medication.
- Of the 2 men with 5 conditions, both (100%) are on medications.

The data was then examined looking at those who were on medications, categorized by the type of mental health condition.

- Of the 14 men on medications who had 1 MH condition, 7 were diagnosed with depression, 6 were Bipolar and 1 was diagnosed with schizophrenia;
- Of the 16 men on medications with 2 conditions, 100% (or 16) were diagnosed with depression (which is not surprisingly given that 100% of those diagnosed with 2 mental health conditions were diagnosed with depression), and of these 16 men, 11 of those also diagnosed with bipolar were on medications, as are the 2 also diagnosed with schizophrenics, 2 diagnosed with depression and PTSD, and the last man in this group receiving medications was diagnosed with depression and anxiety.
- Of the 3 men on medications with 3 conditions (all with depression and anxiety), 2 also diagnosed bipolar are on medications, as is the 1 man who had also been diagnosed with ADHD.

- There is only 1 case with 4 conditions with data on both conditions and medications - and that person is taking medications. This person reports having been diagnosed with depression, bipolar, schizophrenia, and PTSD
- Both of the men with 5 conditions are on medications – and both had been diagnosed with depression, anxiety, bipolar and PTSD, with 1 man also diagnosed with schizophrenia and the other man stating he had another diagnosis, but did not specify what the nature of that diagnosis.

With each dissection of the data (e.g., mental health diagnosis, by type of diagnosis and then whether on medications) the sample size dwindles. Consequently, these data are provided principally as informational because although it appears that the most in need are receiving services (e.g., those a higher number of diagnoses appear to be receiving medication services) within the facility, more data would be required (e.g., interviews with staff or examination of mental health records) to determine if this is the case and/or if additional services are necessary.

#### *Mental Health and Other Issues Explored*

The relationship between mental health diagnoses and several other areas were explored. Nothing of any real interest or substance was discovered on the relationship between reporting a mental health diagnosis and the degree to which the person felt safe in BCDC, and whether or not they had health insurance. There were interesting findings with respect to the desire of detainees for assistance in obtaining medication upon release – particularly those individuals who self-reported taking medications for mental or emotional issues. As noted above, 72 of the respondents self-report a mental health diagnosis, and of these men, 36 (53%) are on medications. Of these 36, 12 (33%) asked for assistance getting medications after release.

However, this is not the complete story, because the question about requesting medication upon release fails to distinguish between medications for a physical versus mental or emotional issues.

The respondents were asked about their physical health when they were provided a list of possible health concerns including Asthma, Hypertension, Hepatitis C, HIV/AIDS, Sexually Transmitted Disease, Diabetes, Arthritis, and Cancer, and were asked to select all the concerns that apply. Of the 200 respondents, 121 (61%) reported having one or more of these health issues, with an average of 1.64 health concerns (within a range from 1 to 5 health concerns). Looking at the physical and mental health data together, of the 200 men in the sample, 171 provided data on these questions and of these 171, 48 (28%) reported having neither a physical health issue nor mental health diagnosis, 51 men (or 30%) reported having a physical health issue but no mental health diagnoses, 18 (11%) reported having a mental health diagnosis but none of the physical health concerns listed, 54 (32%) reported having both a physical and mental health diagnosis. Again turning to the question of whether the men wanted assistance with getting medications upon release and looking also at health status (Figure 1), Of the 18 individuals with a self-reported mental health diagnosis (but no physical health concerns), only one requested assistance with medication. Of the 54 with physical and health concerns, 20 (37%) requested assistance; but whether they wanted medication for their mental or physical health condition, or both is unknown. These results and the data for those without any self-reported health concerns highlights the limitation of these data to distinguish between medications for physical and/or mental health concerns – 11 (or 23%) of the 48 without any declared health issues wanted assistance with medication upon release. There are several possibilities for this finding including that these individuals may have needed medication for a medical condition not listed in



the survey, or perhaps interpreted the question to include substance abuse medications such as methadone or buprenorphine<sup>3</sup>.

**Figure 1: Health Issues and Requesting Assistance with Getting Medications Upon Release**

			Assistance with getting medications		Total
			No	Yes	
Health Status	No Self-Reported Health Issues	Count	37	11	48
		% within Health Status	77.1%	22.9%	100.0%
	Physical Issue	Count	44	7	51
		% within Health Status	86.3%	13.7%	100.0%
	Mental Health Issue	Count	17	1	18
		% within Health Status	94.4%	5.6%	100.0%
	Physical and Mental Health Issues	Count	34	20	54
		% within Health Status	63.0%	37.0%	100.0%
Total		Count	132	39	171
		% within Health Status	77.2%	22.8%	100.0%

The data were also analyzed to observe the relationship between those reporting a mental health diagnosis and demographic characteristics. These results should be viewed cautiously as demographics (particularly race) may be a proxy for access to a mental health services (e.g., less access to services may result in fewer diagnoses)<sup>4</sup>. Given the majority of respondents were African American, and older than 26, the sample sizes become small thus these results should be viewed cautiously.

- *African American detainees were significantly less likely to report having ever been diagnosed with a mental health issue (p<.01)*. Of the 200 detainees, 163 men reported both race and mental health conditions. Among this group, there were 132 black detainees of whom 47 (36%) reported having been diagnosed with a mental health condition in their

<sup>3</sup> This may be explored more fully when the substance abuse data are examined in-depth. However, preliminary analysis shows that of the 48 men without any of the listed health concerns, 8 men wanted treatment – 5 wanted buprenorphine treatment, 2 wanted methadone treatment, and 1 wanted both buprenorphine and methadone treatment. Further, of these 8 men, 2 stated they wanted assistance with getting medications upon release.

<sup>4</sup> See Wells, K., R. Klap, A. Koike, & C. Sherbourne Ethnic Disparities in Unmet Need for Alcoholism, Drug Abuse, and Mental Health Care, *American Journal Psychiatry*, 158, (12) Available: <http://ajp.psychiatryonline.org/cgi/content/full/158/12/2027>

lifetime, compared to of the 31 non-black detainees, 20 (65%) who reported having been diagnosed.

- *Younger men were less likely to report having been diagnosed with a mental health issue* (this was almost statistically significant at  $p=.106$  with a  $p$ -value of  $.10$ ). Again, of the 200 detainees, 156 reported both their age and mental health condition. Of these 156 men, 29 detainees were 26 or under, of whom 8 (28%) reported having been diagnosed compared to 55 (or 44%) of the 127 men 27 years old or older who reported a mental health condition.
- *Those with unstable housing were statistically more likely to report a mental health condition than those with stable housing ( $p<.10$ )*. Housing was defined as stable when one knows both where one can go after leaving the facility, and can stay there for at least 30 days). Of the 159 men who reported both housing plans and mental health status, 72 lacked stable housing, of which 36 (50% or half) reported having a mental health diagnosis in their lifetime. This is compared to 87 men who reported stable housing plans, of which 32 (or 37%) reported having been diagnosed with a mental health issue.
- Other factors that were not significant with respect to mental health diagnosis were age (coded as the actual age of person) and marital status.

### *Relationship of Mental Health to Criminal Behavior*

The relationship between having been diagnosed with a mental health condition and self-reported criminal history was also explored and only two areas were statistically related to mental health (Table 2). The first area was among those who had been convicted as an adult, the number of prior convictions significantly differed between those with a mental health diagnoses and those that did not. Those who had been diagnosed with a mental health issue had, on average, 1.97 more prior convictions than those without a diagnosis.

**Table 2: Mental Health Diagnosis and Prior Convictions and Prior Incarceration**

	N	No Mental Health Condition			Diagnosed Mental Health Condition			Difference
		N	Average	SD	N	Average	SD	
<i>Only Those Convicted as an Adult</i> Number of Convictions	138	76	5.66	5.5	62	7.63	6.0	1.97*
Detainees Previously Incarcerated for More Than 30 days	167	96	.79	.40	71	.93	.25	.14**
<i>Only Those Previously Incarcerated</i> Number of Times Previously Incarcerated	133	69	5.33	5.7	64	5.66	4.6	.32

\* Significantly different at 5%

\*\* Significantly different at 1%

The second relationship that differed for those with a mental health condition was whether the detainee had been previously incarcerated for more than 30 days. With 167 detainees reporting, 93% of those with a mental health diagnosis had been previously incarcerated, compared to 79% of those without a mental health condition. However, there was no difference between those who with a mental health diagnosis and those who did not report a diagnosis on the number of times incarcerated. In order to more fully examine this relationship, regression analysis<sup>5</sup> was conducted which took into account the age of the detainee when they were first arrested, the number of prior arrests, whether convicted of a crime as an adult, whether they served time in a juvenile correctional facility, and age of the detainee at the time of the survey.<sup>6</sup> The results indicated that those who had been diagnosed with a mental illness were significantly (at  $p < .10$ ) more likely to have been previously incarcerated for at least 30 days than those who had not been diagnosed.

<sup>5</sup> Not shown but available upon request.

<sup>6</sup> Regression analysis allows the researcher to simultaneously examine multiple factors thought to be related to the outcomes examined. This is important because failure to do so could erroneously overstate the relationship between mental health and incarceration.

Relationship of Mental Health and Self-Efficacy

In addition to criminal history, we also explored the relationship between mental health diagnoses, whether they were taking medication at the time of the survey for mental or emotional issues, and their reported level of self-efficacy. Self-efficacy is defined as the degree to which one feels they are capable of attaining their goals. It is important to explore the issues of self-efficacy and mental health in an offender population because this relationship has important ramifications for the successful reentry to the community. The Window Replication survey included two questions which measured self-efficacy, which were combined into a Self-Efficacy Scale.<sup>7</sup> As indicated in Table 3, the detainees who had been diagnosed with a mental illness have significantly lower self-efficacy scores on average than those without a mental health diagnosis ( $p < .10$ ). In addition, of the 66 men with a mental health diagnoses and reporting on these measures, 35 detainees were taking medications and these individuals also report significantly lower self-efficacy scores ( $p < .05$ ) than those who do not take medication.

**Table 3: Mental Health and Medication and Self-Efficacy Scores**

<i>(Higher Values = Higher Self-Efficacy)</i>	N	No Mental Health Condition			Diagnosed Mental Health Condition			Difference
		N	Average	SD	N	Average	SD	
Self-Efficacy Scale Score	170	99	3.25	.77	71	3.04	.74	-.21+
	N	Not on Medication for Mental or Emotional			On Medication for Mental or Emotional			Difference
		N	Average	SD	N	Average	SD	
Self-Efficacy Scale Score	66	31	3.30	.55	35	2.90	.79	-40*

+ Significantly different at 10%

\* Significantly different at 5%

<sup>7</sup> Survey respondents were asked to rate their agreement to two statements on a range from 1 to 4, where a higher score indicated a higher level of self-efficacy. The scale combined the two questions and had good reliability (Cronbach's Alpha of .78) and factor analysis confirmed the questions could be combined (Eigenvalue of 1.65).

To further understand the relationship between self-efficacy and those diagnosed with mental health, regression analysis<sup>8</sup> was conducted and included the age of the detainee at first arrest, the number of prior arrests, whether they had ever been incarcerated for more than 30 days, and whether they had stable housing (as noted above, this was defined as those who have a place to go after they are released and they can stay at that location for at least 30 days). Results indicate two factors which significantly influenced the detainees reported self-efficacy scale scores -- those who had not been diagnosed with a mental illness ( $p < .05$ ) and those with stable housing both had statistically significant higher self-efficacy scores ( $p < .05$ ) than those who had been diagnosed or anticipated an unstable housing situation.

## **Conclusion**

This in-depth analysis of the mental health conditions of detainees in BCDC is an initial attempt to further understand this population and their mental health needs upon release. The data reveals that 42% of the detainees had been diagnosed with one or more mental health issue in their lifetime, and of these men, 49% had been diagnosed with 2 or more conditions and of those with declared mental health illnesses, 54% were on medication. Further, more than a third of these men stated they desired mental health services upon release, which is often a challenge for this population.<sup>9</sup> As previously noted, research in this area has revealed racial disparities in access to services, which may help to explain the differences in men's reporting of mental health conditions in these data. If this is the case, the extent of the problem among BCDC detainees may be even larger than indicated herein.

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<sup>8</sup> Not shown but available upon request.

<sup>9</sup> Freudenberg, N. (2004). Community Health Services for Returning Jail and Prison Inmates, Journal of Correctional Health Care, 10, (3), 369-397

The other issue is the relationship between mental health diagnosis and criminal history. Those who reported a mental health diagnosis had significantly more convictions, and a higher percentage of detainees with a mental health condition had been previously incarcerated for more than 30 days, even after taking into account relevant factors that could explain these differences (including seriousness of criminal history and age). Again, it is important to note that it is a difference in the number of people incarcerated -- not a difference in the number of times one is incarcerated. Among the group of detainees who had been previously incarcerated, there is no difference in the number of times one was previously incarcerated based on whether or not one had a mental health condition. Nonetheless, this may indicate the need for further use of diversion programs for those with mental health issues.

The other relevant finding is that housing stability and self-reported mental health conditions are related – although it is impossible to discern whether mental illness leads to housing instability or vice versa. There are also concerns with respect to self-efficacy and mental health, and the interplay of the use of medications for emotional or mental issues. It is likely that those receiving medication are the individuals that are most disadvantaged, but perhaps these data provide information that may lead to intersections for intervention. Such as housing to increase one's overall stability and/or cognitive development programs geared toward increased self-efficacy, ideally culturally competent for those with mental health concerns.

Given the scope of data in the Window Replication Study, there are more areas to be explored including the relationship between mental health and substance abuse, desire for treatment, and factors such as employment, family relationships, and neighborhood conditions (including the zip code where detainees plan to live upon release). While there remains much to learn, these results provide a starting point for planning and assistance for these BCDC detainees.

**Appendix A – Question 176 – Men’s Survey**

Step 1: What kinds of services will be useful to you when you are released? (Select all that apply).

Step 2: Then of all the services you selected, choose only 5 of the services you identified and rank order them by how important they are to you where 1=highest priority and 5=lowest priority.

- |                             |                      |                             |  |
|-----------------------------|----------------------|-----------------------------|--|
| <input type="radio"/> _____ | Housing              | <input type="radio"/> _____ | Sexual Transmitted Infections and/or HIV testing |
| <input type="radio"/> _____ | Food                 | <input type="radio"/> _____ | Applying for Health Care Benefits                |
| <input type="radio"/> _____ | Shelter              | <input type="radio"/> _____ | Applying for Benefits (TANF, Food Stamps)        |
| <input type="radio"/> _____ | Transportation       | <input type="radio"/> _____ | Assistance with getting medications              |
| <input type="radio"/> _____ | Clothing             | <input type="radio"/> _____ | Needle exchange/harm reduction                   |
| <input type="radio"/> _____ | Basic Health Care    | <input type="radio"/> _____ | Support group: "Taking care of Business"         |
| <input type="radio"/> _____ | Mental Health Care   | <input type="radio"/> _____ | Obtaining an ID                                  |
| <input type="radio"/> _____ | Drug Treatment       | <input type="radio"/> _____ | Education/GED                                    |
| <input type="radio"/> _____ | Vision care          | <input type="radio"/> _____ | Employment                                       |
| <input type="radio"/> _____ | Dental care          | <input type="radio"/> _____ | Job Training                                     |
| <input type="radio"/> _____ | HIV care             | <input type="radio"/> _____ | Legal Services                                   |
| <input type="radio"/> _____ | NA/AA Meetings       | <input type="radio"/> _____ | Child Support Modification/Arrearage             |
| <input type="radio"/> _____ | Family Reunification | <input type="radio"/> _____ | Spiritual/Religious Community                    |