# Mental Illness In Jails Supplement FY 2015

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## **Summary**

Virginia's Compensation Board provided data on jail inmates with mental illness. A previous report has been written that describes that data. This analysis expands on that report, providing additional detail on diverse components of the dataset such as inmate aggression and mental health screening.

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#### I. Data Sources

Most of the data in this report are taken from a survey of mental health in jails undertaken by the Virginia Compensation Board and more fully described in their report on that survey entitled Mental Illness in Jails Report 2015. Data on financing of the community service boards (CSBs) was obtained through Virginia's Department of Behavioral Health and Developmental Services (DBHDS). Their information on the number of consumers is stored in the Community Consumer Submission 3 (CCS3), a database that contains information on the service usage in the CSBs. CSB budget information is available in the DBHDS report 2015 Overview of Community Services in Virginia.

### II. Mental Illness and Substance Abuse Across Virginia's Regions

DBHDS coordinates mental health services across 5 health planning regions (HPR), which are further divided into 40 CSBs. In 2015, the number of inmates with mental illness (MI) and substance use disorders (SUD) per jail did not differ by HPR. The percentage of inmate days served by inmates with MI did not differ between Regions 2, 4 and 5, but they did differ between regions 1 and 3 (Chi-squared=6.0, p=0.0144). Medians were determined using SAS software.

**Table 1:** Distributions of numbers of inmates with MI and/or SUD per jail.

| Disability             | Median      | Interquartile |
|------------------------|-------------|---------------|
|                        | inmates per | Range         |
|                        | jail        | (IQR)         |
| Co-occurring MI/SUD    | 36          | 13-69         |
| MI with or without SUD | 84.5        | 37-160        |
| SUD without MI         | 22          | 8-90          |
| SUD with or without MI | 56.5        | 24-164        |

Table 2: Median percentage of inmate days served by inmates with MI by Region.

| HPR               | Number   | MI % of Inmate |
|-------------------|----------|----------------|
|                   | of Jails | days           |
| 1 (Northwest VA)  | 13       | 10.6           |
| 2 (DC area)       | 5        | 22.9           |
| 3 (Southwest VA)  | 15       | 31.9           |
| 4 (Richmond area) | 9        | 18.4           |
| 5 (Southeast VA)  | 16       | 16.9           |

# III. Acts of Inmate Aggression

The compensation board survey included information on acts of aggression committed by inmates against staff and other inmates. Determinations of victim and perpetrator status are

made by jail staff, which could impact the reliability of results. Out of all acts of aggression by an inmate, the perpetrator was diagnosed as mentally ill in 34% of cases. Out of all acts of aggression in which one inmate assaulted or threatened another, the victim was diagnosed as mentally ill in 19% of cases. Aggression between inmates was not associated with DBHDS region.

**Table 3:** The percent of acts of aggression where the perpetrator or victim were diagnosed with mental illness, per jail.

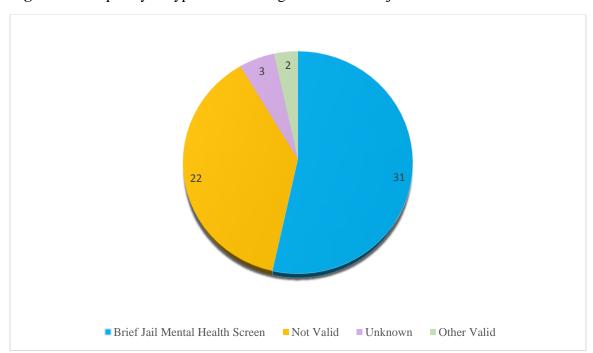
| Percentage                         | Median | IQR   |
|------------------------------------|--------|-------|
| Acts of aggression by inmates      | 11%    | 0-50% |
| where Perpetrator MI               |        |       |
| Acts of aggression between inmates | 0%     | 0-11% |
| where Victim MI                    |        |       |

## IV. Screening

Different types of screening are used in jails to determine if an inmate may need a psychological assessment. Some of them are valid for this purpose, and some are not (Table 3). There were also some jails that did not indicate if the instrument was valid, saying "mental health screening" or identifying the person who approved the instrument rather than the instrument name (Figure 2). Eastern Shore Regional Jail does not attempt any mental health screening.

**Table 4:** Forms of screening used in jails.

| Valid Measures                                      | Non-valid measures  |  |
|---|---|--|
| Brief Jail Mental Health Screen                     | <ul> <li>Instruments designed by jail MH staff</li> </ul> |  |
| <ul> <li>JASAT (Jail Admission Screening</li> </ul> | <ul> <li>CorEMR Mental Health Screening</li> </ul>        |  |
| Assessment Test)                                    | • ERMA-CCS  |  |
| GAIN (Global Appraisal of Individual                | <ul> <li>Mental Health Initial Evaluation</li> </ul>      |  |
| Needs)  | <ul> <li>Integrated Intake Screening</li> </ul>           |  |
|   | <ul> <li>Medical Screening form</li> </ul>                |  |
|   | <ul> <li>Classification Screening form</li> </ul>         |  |
|   | No Screening  |  |



**Figure 1:** Frequency of types of screening used across 58 jails.

Screenings were reclassified so that the Brief Screen and other valid measures form one category, "Valid," and unknown or non-valid measures are classified as "Not Valid." Using this two-level variable, screening type was not associated with the proportion of total inmate days served by inmates with any given diagnosis, or with the number of inmates with any given diagnosis.

## V. Types of Mental Illness

Seven categories of mental illness were identified in the survey: anxiety disorder, major mood disorders, mild depression, schizophrenia, post-traumatic stress disorder (PTSD), other MI diagnosis and believed ill with no diagnosis. Major mood disorders include bipolar disorder and major depression. The greatest number of inmate days were attributed to inmates with major mood disorders (Table 5). Inmates were also more frequently diagnosed with major mood disorders than other diagnoses (Table 6). Diagnosis category was associated with type of crime committed (Chi-square=310.9, df=36, p < 0.0001). Table 7 identifies which groups are statistically more likely or less likely to commit certain crimes. It should be noted that, in this analysis, the different diagnostic groups are being compared with inmates with other MI diagnoses, not with the prison population as a whole.

**Table 5:** Distribution of inmate days by diagnosis category.

| Diagnosis           | Median Bed Days per | IQR      |
|---------------------|---------------------|----------|
|                     | Jail                |          |
| Major Mood Disorder | 530                 | 108-1198 |
| Mild Depression     | 206.5               | 30-547   |
| Anxiety             | 205                 | 30-484   |
| Schizophrenia       | 146.5               | 30-509   |
| Other Diagnosis     | 82.5                | 0-381    |
| PTSD                | 30                  | 0-244    |
| No Diagnosis        | 26.5                | 0-116    |
| Total Inmates MI    | 1750                | 415-3903 |

**Table 6:** Distribution of inmates by diagnosis category.

| Diagnosis           | Median Inmates per Jail | IQR  |
|---------------------|-------------------------|------|
| Major Mood Disorder | 20.5                    | 9-46 |
| Mild Depression     | 12                      | 3-25 |
| Anxiety             | 12                      | 2-19 |
| Schizophrenia       | 9                       | 3-21 |
| Other Diagnosis     | 4                       | 0-16 |
| PTSD                | 2                       | 0-8  |
| No Diagnosis        | 1                       | 0-9  |

 Table 7: Increased and decreased frequency of certain crimes in diagnostic groups.

| Type of Offense          | Diagnostic Groups More | Diagnostic Groups Less |
|--------------------------|------------------------|------------------------|
|                          | Likely to be Charged   | Likely to be Charged   |
| Ordinance Violation      | anxiety,               | suspected MI           |
|                          | other                  |                        |
| Drug-related Misdemeanor | anxiety,               | other                  |
|                          | PTSD                   |                        |
| Non-violent Misdemeanor  | suspected MI           | major mood disorders   |
| Violent Misdemeanor      | PTSD                   | other                  |
| Drug-related Felony      | anxiety,               | schizophrenia,         |
|                          | other                  | suspected MI           |
| Non-violent Felony       | major mood disorders   | schizophrenia          |
| Violent Felony           | schizophrenia          | anxiety disorders,     |
| ·                        |                        | PTSD                   |

#### VI. Treatment

Data was obtained on four categories of treatment: individual therapy, group therapy, group SUD treatment and other treatment. Hours of treatment provided by the local CSB varied by HPR (Table 8, F=9.8, df=4, p=<0.0001). The statistical significance is driven by the number of hours in region 2, which is much greater than the other four regions. This could be related to the fact that the CSBs in region 2 tend to have more funding per person that the other regions. Treatment from other types of providers did not differ by region at a statistically significant level. Total treatment hours differed by region as well (F=10.53, df=4, p=<0.0001).

As seen in Table 9, hours of treatment varied by provider (Chi-square=23.5, df=4, p=0.0001), with psychiatrists providing the highest median number of hours per jail. They also varied by type of treatment (Chi-square=34.3, df=3, p=<0.0001), with the highest median number of hours provided as individual therapy. Hours of individual counseling per recipient were not associated with HPR. Statewide, the median number of hours of individual counseling per recipient was 1 hour (IQR 0.33-1.14).

**Table 8:** Distribution of treatment hours from CSB staff and overall, by HPR.

| DBHDS  | Median CSB     | IQR     | Median Overall  | IQR      |
|--------|----------------|---------|-----------------|----------|
| Region | Treatment      |         | Treatment Hours |          |
| -      | Hours per Jail |         | per Jail        |          |
| 1      | 4              | 0-32    | 52              | 12-80    |
| 2      | 380            | 180-722 | 722             | 380-1200 |
| 3      | 1              | 0-12    | 20              | 2-129    |
| 4      | 3              | 1-32    | 142             | 44-258   |
| 5      | 2              | 0-122   | 55              | 4-376    |

**Table 9:** Distribution of treatment hours, per jail, by treatment type, and by treatment provider.

| Treatment           | Median          | IQR      |
|---------------------|-----------------|----------|
|                     | Hours Treatment |          |
| Types of treatment  |                 |          |
| Individual          | 20.5            | 2.5-99.5 |
| Group SUD           | 5               | 0-38     |
| Other               | 0               | 0-15     |
| Group Therapy       | 0               | 0-3.5    |
| Treatment Providers |                 |          |
| Psychiatrist        | 11              | 0-37     |
| M.D.                | 0               | 0-4      |
| Jail Staff          | 2.5             | 0-68     |
| CSB Staff           | 0               | 0-8      |
| Private Contractor  | 1               | 0-30     |

All jails provide medication for inmates. There are a wide variety of pharmacies used (Table 10), although 13% of inmates with MI refused medication.

The medications provided in jails were categorized as antipsychotics, mood stabilizers, antidepressants, and anti-anxiety medications. In June 2015, the most frequently dispensed category of medication was antidepressants (Table 12). The most frequently dispensed type of antipsychotic is Seroquel and the most frequently prescribed type of anticonvulsant is Depakote. Both of these medications are available in the community through Medicaid; however at least 64% of antipsychotic medications prescribed were not Medicaid-compatible. At least 24% of anticonvulsants and mood stabilizers were not available through Medicaid either.

**Table 10:** Pharmacies used by jails in Virginia.

#### Pharamacies that provide jails with medications

- CCS/Conmed
- Charlotte Drug
- Commonwealth Pharmacy
- Contract Pharmacy Services (CPS)
- Corizon
- Correct Care
- Correct Rx
- CSB
- CVS
- Diamond
- Family Pharmacy
- Farmville Pharmacy
- H&H
- Individual Pharmacist
- Kroger
- Mediko
- Moore Medical
- NaphCare
- PNS
- Rappahannock Creative
- Southern Health
- Spring Drug
- Stony Creek Pharmacy
- Walgreens
- Westwood
- White Stone Pharmacy

**Table 11:** Medications provided in jails.

| Medication                | Number of prescriptions | Jails that provide | Median<br>per jail | IQR    |
|---------------------------|-------------------------|--------------------|--------------------|--------|
|                           | dispensed in 6/2015     |                    |                    |        |
| Anti-psychotics           |                         |                    |                    |        |
| Seroquel*                 | 674                     | 49                 | 4                  | 1-16   |
| Zyprexa                   | 630                     | 55                 | 2.5                | 0-9    |
| Risperdal                 | 613                     | 56                 | 4                  | 1-11   |
| Haldol                    | 290                     | 56                 | 2                  | 0-4    |
| Triliafon                 | 104                     | 53                 | **                 |        |
| Geodon*                   | 95                      | 48                 | **                 |        |
| Abilify*                  | 93                      | 46                 | **                 |        |
| Prolixin                  | 64                      | 53                 | **                 |        |
| Thorazine                 | 56                      | 50                 | **                 |        |
| Clorazil                  | 7                       | 46                 | **                 |        |
| Other anti-psychotics     | 133                     | 53                 | **                 |        |
| Mood Stabilizer/Anticonvo | ılsants                 |                    |                    |        |
| Depakote*                 | 703                     | 57                 | 5                  | 1-10   |
| Lithobid                  | 405                     | 56                 | 3                  | 0-6    |
| Tegretol*                 | 187                     | 56                 | 0.5                | 0-3    |
| Topamax*                  | 196                     | 55                 |                    |        |
| Trileptal*                | 42                      | 54                 |                    |        |
| Other mood disorder meds. | 217                     | 57                 |                    |        |
| Other                     |                         |                    |                    |        |
| Antidepressants           | 4837                    | 58                 | 40.5               | 16-106 |
| Anti-anxiety meds.        | 1706                    | 48                 | 3                  | 0-36   |

<sup>\*</sup>Also available through Virginia Medicaid.

## VII. Case Management

Forty jails identified types of follow up case management that they provided to former inmates after release. Of the remaining 18, four stated that they provided follow up without specifying the type of service, 15 admitted to providing no follow up. The provision of follow up case management was not associated with the provision of mental health services in jails. The most common type of follow up is referral to the CSB (Table 12). The second most frequent option, discharge planning, may also include CSB involvement.

<sup>\*\*</sup>Distributions not described for medications that were distributed by fewer than half of jails during June 2015.

**Table 12:** Types of case management provide to inmates with MI after they are released.

| Type of service/support                                 | Number of jails that provide service | Percent of all jails |
|---|--------------------------------------|----------------------|
| Referral to CSB   | 23                                   | 40                   |
| Discharge planning                                      | 8                                    | 14                   |
| Referral to other services (e.g. housing, primary care) | 8                                    | 14                   |
| Medication management                                   | 5                                    | 9                    |
| Mental health services                                  | 4                                    | 7                    |
| Referral to offender advocacy organizations             | 3                                    | 5                    |
| Crisis services   | 2                                    | 3.5                  |
| Housing   | 2                                    | 3.5                  |
| SA services   | 2                                    | 3.5                  |
| Handouts  | 1                                    | 2                    |
| ID services   | 1                                    | 2                    |

## VIII. Housing Patients with MI in Jail

Only 20 jails contain an MH treatment unit. Among those 20, the median number of beds is 22 (IQR 7-39.5). Isolation is the other alternative to housing within the general jail population. Fourty-five jails placed at least one inmate with MI in isolation in June 2015. Overall, the median number of MI isolation days per jail was 36 (IQR 4-256). The median amount of time those inmates spent in isolation was 10 days (IQR 1-19) per person.