

State of Vermont Agency of Human Services

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MEMORANDUM

TO: Senate Committee on Health and Welfare

House Committee on Health Care

FROM: Melissa Bailey, Commissioner, Department of Mental Health

DATE: February 21, 2018

SUBJECT: Responses to Data Inquiries regarding Act 82 and Act 84 AHS Legislative Reports

Please find attached, response from the Department of Mental Health, submitted in response to inquiries received regarding the Act 82, Sections 3 & 4 Report¹ and Section 5 Report² submitted to the legislature on December 15, 2017, as well as responses to the Act 84, Section 31 AHS Facilities report submitted to the legislature on January 15, 2018. This document has been updated as of this submission to provide information that is current as of 2/21/2018.

¹ http://mentalhealth.vermont.gov/sites/dmh/files/documents/news/Act 82 Sections 3 and 4 12-15-17.pdf

² http://mentalhealth.vermont.gov/sites/dmh/files/documents/news/Act 82 Section 5 12-15-17.pdf

ACT 82, SECTIONS 3 & 4 Q&A

PART 1

QUESTIONS FOR DEPARTMENT OF MENTAL HEALTH ON DATA RELATED TO THE MENTAL HEALTH REPORT

EMERGENCY DEPARTMENT UTILIZATION

Source: HHC **Q1**: What is the actual trend line, in number of persons presenting with a psychiatric complaint at emergency departments annually, over the past 10 years?

+ Child/Adult breakout

A1:

Reliable data collection for emergency department wait times for **involuntary inpatient placement** started in 2013—in response to 2012 Act 79. DMH has data on waits for both children and adults for those time periods and they are presented in response to question three (3) below.

DMH worked with VAHHS in order to quantify all psychiatric complaints presenting at the emergency department, **regardless of inpatient need.** Figures are available for 2012-2017 below.

| | | nospitai riscai feai (Oct-sep) | | | | | |
|--------------------------------------|-----------------|--------------------------------|-------|-------|-------|-------|-------|
| | _ | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| # ED visits related to Mental Health | Children (0-17) | 944 | 1,112 | 1,087 | 1,239 | 1,252 | 1,363 |
| | Adults (18+) | 7,020 | 7,119 | 7,016 | 7,405 | 7,805 | 8,058 |
| to Merital Health | Total | 7,964 | 8,231 | 8,103 | 8,644 | 9,057 | 9,421 |

Hospital Fiscal Voor (Oct. Son)

Data Source: Vermont Association of Hospitals and Health Systems – Network Services Organization (VAHHS-NSO), Vermont Uniform Hospital Discharge Data Set

VAHHS-NSO did not engage with hospitals to perform a patient level reconciliation. This is aggregate data pulled from the discharge data warehouse as received from Vermont Hospitals. Mental health services were identified by the CCS (clinical classification software) group of the primary diagnosis being "Mental Illness." Alcohol and substance use disorders are excluded. Counts are for encounters and do not represent individual patients. ED status is derived by inclusion of a 450 revenue code.

Finding: Total visits related to mental health at emergency departments has increased for both children and adults over the 6-year time-period.

Source: HHC **Q2**: Do we know how this [the trend line of persons presenting with a psychiatric complaint at emergency departments annually] compares to emergency room utilization as a whole (for other needs)?

+ Child/Adult breakout



A2:

DMH worked with VAHHS on obtaining this data and figures are available from 2012-2017 below.

Hospital Fiscal Year (Oct-Sep)

| ED Visits | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|------------------|---------|---------|---------|---------|---------|---------|
| Total | 274,575 | 269,947 | 261,946 | 266,164 | 267,155 | 260,804 |
| MH-related | 7,964 | 8,231 | 8,103 | 8,644 | 9,057 | 9,421 |
| not MH-related | 266,611 | 261,716 | 253,843 | 257,520 | 258,098 | 251,383 |
| % MH related | 2.90% | 3.05% | 3.09% | 3.25% | 3.39% | 3.61% |

Data Source: Vermont Association of Hospitals and Health Systems – Network Services Organization (VAHHS-NSO), Vermont Uniform Hospital Discharge Data Set

VAHHS-NSO did not engage with hospitals to perform a patient level reconciliation. This is aggregate data pulled from the discharge data warehouse as received from Vermont Hospitals. Mental health services were identified by the CCS (clinical classification software) group of the primary diagnosis being "Mental Illness." Alcohol and substance use disorders are excluded. Counts are for encounters and do not represent individual patients. ED status is derived by inclusion of a 450 revenue code.

Findings: While the overall percentage of MH-related visits to the ED is a small percentage of overall ED services, the number of MH-related visits has increased while the number of non-MH related visits has decreased leading to an overall increase in proportion from 2.9% to 3.6%.

Source: HHC

Q3a: During that time [over the past 10 years], has the percentage of those [persons presenting with a psychiatric complaint at emergency departments annually] who are admitted, or transferred, to an inpatient unit (versus stabilized and leave the ED), changed?

Q3b: The percentage of those admitted voluntarily versus involuntarily?

Q3c: The percentage arriving as a court-ordered (forensic) referral?

+ Child/Adult breakout

A3a / A3b / A3c:

As part of our data collection on emergency room wait times, DMH has data on whether the final disposition of a person waiting was involuntary hospitalization, voluntary hospitalization, or non-admission. Data for each of our primary populations are presented below.

Note- While DMH receives data from hospitals and screeners on some individuals waiting voluntarily in emergency departments for inpatient admission, we do not have enough information to determine whether this is representative sample of all individuals waiting voluntarily.



Data on adults waiting in the emergency department on involuntary status

By civil involuntary status (emergency exams and warrants)

| | Adults Waiting for Involuntary Inpatient Placement | | | | | | |
|-------|---|--------------------|-----------------|------------------|--|--|--|
| | Warrants and Emergency Exams | | | | | | |
| | Total Placements by Final Disposition | | | | | | |
| | | <u>Involuntary</u> | Other Placement | Voluntary | | | |
| FY | <u>Total</u> | <u>Inpatient</u> | or Hold Expired | <u>Inpatient</u> | | | |
| 2014 | 497 | 393 | 90 | 14 | | | |
| 2015 | 544 | 446 | 88 | 10 | | | |
| 2016 | 551 | 480 | 67 | 4 | | | |
| 2017 | 579 | 459 | 112 | 8 | | | |
| CY | | | | | | | |
| 2013* | 396 | 310 | 77 | 9 | | | |
| 2014 | 511 | 415 | 84 | 12 | | | |
| 2015 | 523 | 445 | 69 | 9 | | | |
| 2016 | 571 | 475 | 90 | 6 | | | |
| 2017 | 610 | 480 | 118 | 12 | | | |
| | * Partial Years. Reliable data collection for emergency dept waits started in | | | | | | |

March 2013.

By forensic involuntary status (emergency exams and warrants)

| (| Adults Waiting for Involuntary Inpatient Placement Court-Ordered Forensic Observations | | | | | | |
|---|---|---------------------|--------------|--|--|--|--|
| | Total Placeme | nts by Final Dispos | ition | | | | |
| FY | <u>Total</u> | <u>Admitted</u> | Not Admitted | | | | |
| 2014 | 66 | 50 | 16 | | | | |
| 2015 | 53 | 45 | 8 | | | | |
| 2016 | 65 | 57 | 8 | | | | |
| 2017 | 66 | 53 | 13 | | | | |
| CY | | | | | | | |
| 2013* | 57 | 43 | 14 | | | | |
| 2014 | 54 | 45 | 9 | | | | |
| 2015 | 59 | 52 | 7 | | | | |
| 2016 | 68 | 57 | 11 | | | | |
| 2017 | 65 | 49 | 16 | | | | |
| * Partial Years. Reliable data collection for emergency dept waits started in March 2013. | | | | | | | |



Comparision of adults by forensic vs civil status, percent admitted

| | , | Emergency Exams P | ercent Admitte | | | |
|-------|-------|----------------------|----------------|-------|---------------|-----|
| | | Involuntary | | | Court Ordered | |
| | | Inpatient | | | Forensic | |
| Υ | Total | # Admitted | % | Total | # Admitted | % |
| 2014 | 497 | 393 | 79% | 66 | 50 | 76% |
| 2015 | 544 | 446 | 82% | 53 | 45 | 85% |
| 2016 | 551 | 480 | 87% | 65 | 57 | 88% |
| 2017 | 579 | 459 | 79% | 66 | 53 | 80% |
| CY | | | | | | |
| 2013* | 396 | 310 | 78% | 57 | 43 | 75% |
| 2014 | 511 | 415 | 81% | 54 | 45 | 83% |
| 2015 | 523 | 445 | 85% | 59 | 52 | 88% |
| 2016 | 571 | 475 | 83% | 68 | 57 | 84% |
| 2017 | 610 | 480 | 79% | 65 | 49 | 75% |

Comparision of adults by forensic vs civil status, percent waiting for inpatient care

| | Total Waiting | Emergenc and Wa | - | Court O Forer Observ | nsic |
|-------|------------------|--------------------|-------|----------------------------|-------|
| FY | | # Waiting | Row % | # Waiting | Row % |
| 2014 | 563 | 497 | 88% | 66 | 12% |
| 2015 | 597 | 544 | 91% | 53 | 9% |
| 2016 | 616 | 551 | 89% | 65 | 11% |
| 2017 | 645 | 579 | 90% | 66 | 10% |
| CY | | | | | |
| 2013* | 453 | 396 | 87% | 57 | 13% |
| 2014 | 565 | 511 | 90% | 54 | 10% |
| 2015 | 582 | 523 | 90% | 59 | 10% |
| 2016 | 639 | 571 | 89% | 68 | 11% |
| 2017 | 675 | 610 | 90% | 65 | 10% |



Data on youth waiting in the emergency department on involuntary status

| Youth Waiting for Involuntary Placement Total Placement by Final Disposition | | | | | |
|--|----------------|---------------------|--------------|--|--|
| | <u>Total</u> | <u>Admitted</u> | Not Admitted | | |
| FY | | | | | |
| 2014 | 84 | 78 | 6 | | |
| 2015 | 71 | 66 | 5 | | |
| 2016 | 56 | 48 | 8 | | |
| 2017 | 74 | 66 | 8 | | |
| | | | | | |
| CY | | | | | |
| 2013* | 52 | 48 | 4 | | |
| 2014 | 77 | 72 | 5 | | |
| 2015 | 62 | 59 | 3 | | |
| 2016 | 64 | 55 | 9 | | |
| 2017 | 68 | 55 | 13 | | |
| * [| Partial Years. | Reliable data col | lection for | | |
| • | emergency dep | ot waits started in | March 2013. | | |
| | • | | | | |

Almost all of the children waiting in the EDs under the commissioner's custody convert to voluntary at admission to inpatient.

Source: HHC

Q4: Do we know how many of these persons [presenting with a psychiatric complaint at emergency departments annually] had been discharged from a hospital within the prior 30 days?

+ Child/Adult breakout

A4:

DMH has produced the involuntary 30-day readmission rates (refer to question 11) which we believe are comparable to what the committee is seeking and are also available in the annual Act 79 report. We do not have enough reliable common elements between our datasets for involuntary inpatient wait times and involuntary inpatient admissions to make a confident match between the two.

Source: HHC

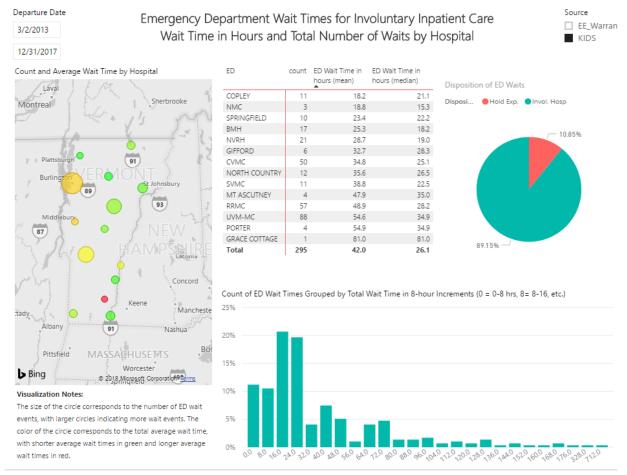
Q5: Do we have any data on whether there are geographic differences?

+ Child/Adult breakout



A5:

Emergency Dept. Wait Times for Involuntary Inpatient Admissions for Children/Youth
EE/Warrants



From March 2013 to December 2017, a total of 295 children/youth were held in emergency depts. under the temporary custody of the commissioner. UVM-MC had the most holds (88), followed by RRMC (57) and CVMC (50), which accounts for 66% of the total holds during the time period. Regional differences in wait times are included in the table above. Of the 14 hospitals, 9 had average wait times below the statewide average. Almost all of the children waiting in the EDs under the commissioner's custody convert to voluntary at admission to inpatient.



Departure Date Emergency Department Wait Times for Involuntary Inpatient Care EE_Warra 3/2/2013 Wait Time in Hours and Total Number of Waits by Hospital □ KIDS 12/31/2017 Count and Average Wait Time by Hospital ED count ED Wait Time in ED Wait Time in hours (mean) hours (median) Disposition of ED Waits Laval RRMC 446 Disposi... Hold Exp. Invol. Host Sherbrooke Montreal COPLEY 51 39.8 Voluntary NVRH 143 40.4 17.7 GRACE COTTAGE 11 41.2 23.6 вмн 186 62.4 31.5 19.15% NMC 34 69.6 41.2 CVMC 339 42.6 UVM-MC 51.8 459 73.5 MT ASCUTNEY 34 73.8 47.5 14 VA 75.2 67.2 93 PORTER 85 76.0 48.7 SVMC 117 76.4 47.3 NORTH COUNTRY 78.8 49.5 87 GIFFORD 44.2 38 78.68% -SPRINGFIELD 82.9 2162 62.9 32.9 Total Count of ED Wait Times Grouped by Total Wait Time in 8-hour Increments (0 = 0-8 hrs, 8= 8-16, etc.) Mancheste MASSACHUSETTS Worcester **Bing** © 2018 Microsoft Corporation97 Visualization Notes:

Emergency Dept. Wait Times for Involuntary Inpatient Admissions for Adult EE/Warrants

From March 2013 to December 2017, a total of 2162 adults were held in emergency depts. under the temporary custody of the commissioner. UVM-MC had the most holds (459), followed by RRMC (446) and CVMC (339), which accounts for 58% of the total holds during the time period. Regional differences in wait times are included in the table above. Of the 15 hospitals, 5 had average wait times below the statewide average. While RRMC and UVM-MC had the same volume of EE holds for adults, RRMC's wait time to disposition was quicker, at 38 hours on average vs 73.5 hours. Of the 15 hospitals, 5 had average wait times below the statewide average. 79% of adults waiting in the EDs under the commissioner's custody were admitted to the hospital involuntarily.

8.0 16.0 24.0 32.0 40.0 48.0 56.0

Source: **Q6**: What are the average ED wait times (by month) in 2017? (Separate data by voluntary and involuntarily held patients and region of the State).

The size of the circle corresponds to the number of ED wait events, with larger circles indicating more wait events. The color of the circle corresponds to the total average wait time.

with shorter average wait times in green and longer average



A6:

Reliable data collection for emergency department wait times for **involuntary inpatient placement** started in 2013—in response to 2012 Act 79. DMH has data on waits for both children and adults for those time periods and is presented in below.

| | | Avg# | Mean | Median |
|------|-----|---------|------|--------|
| | | Waiting | Wait | Wait |
| | | Per Day | Time | Time |
| | Jan | 4 | 63 | 45 |
| | Feb | 4 | 45 | 27 |
| | Mar | 4 | 60 | 40 |
| | Apr | 5 | 56 | 33 |
| | May | 6 | 76 | 54 |
| 2017 | Jun | 5 | 48 | 28 |
| 2017 | Jul | 8 | 75 | 52 |
| | Aug | 9 | 95 | 68 |
| | Sep | 11 | 135 | 70 |
| | Oct | 10 | 106 | 70 |
| | Nov | 6 | 105 | 62 |
| | Dec | 2 | 41 | 28 |
| 2010 | Jan | 3 | 52 | 32 |
| 2018 | Feb | 2 | 41 | 22 |

INPATIENT BED DEMAND

Source:

Q7: What is the 10-year trend line for number of [inpatient] admissions?

HHC

+ Child/Adult breakout

A7:

DMH has matchable data on involuntary hospitalizations for adults, Medicaid-paid hospitalizations for adults, and Medicaid-paid hospitalizations for children. Private-paid hospitalizations are not accessible to DMH.

DMH worked with VAHHS and has admissions data provided below. The VAHHS data below does not include discharges from VPCH or Brattleboro Retreat (BR), as psychiatric hospitals were not required to report discharges to the dataset. VPCH data is presented in the table following VAHHS data. As BR is not captured in the data, <u>admissions for children in this table are not representative of psychiatric admissions in Vermont</u> (please note the Medicaid-paid children's hospitalizations are provided separately below). Since discharge data does not capture psychiatric



unit, admissions are defined by a primary diagnosis that is MH-related. Also please note that this data represents admissions and not people, as people can be admitted multiple times during the year.

Finding: Adult MH-related inpatient admissions have increased from 2012 to 2017.

Hospital Fiscal Year (Oct-Sep)

| MH-re | lated |
|-------|-------|
|-------|-------|

| Inpatient Admissions | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|-----------------------------|-------|-------|-------|-------|-------|-------|
| Total | 1,920 | 2,066 | 1,896 | 1,960 | 2,069 | 2,104 |
| Children (0-17) | 8 | 18 | 5 | 9 | 27 | 35 |
| Adults (18+) | 1,912 | 2,048 | 1,891 | 1,951 | 2,042 | 2,069 |

 ${\it Data Source: Vermont Association of Hospitals and Health Systems-Network Services Organization (VAHHS-NSO), Vermont Uniform Hospital Discharge Data Set}$

VAHHS-NSO did not engage with hospitals to perform a patient level reconciliation. This is aggregate data pulled from the discharge data warehouse as received from Vermont Hospitals. Mental health services were identified by the CCS (clinical classification software) group of the primary diagnosis being "Mental Illness." Alcohol and substance use disorders are excluded. Counts are for encounters and do not represent individual patients.

| | Hosptial Fiscal Year (Oct-Sep) | | | | | |
|----------------------------|--------------------------------|------|------|------|------|------|
| Admissions to VPCH | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| Total Number of Admissions | 0 | 39 | 38 | 56 | 67 | 70 |

Vermont State Hospial closed in August 2011 due to Hurricane Irene. GMPCC opened in January 2013 with 8 beds. The name of this temporary State Hospital changed to VPCH.. Tthe new hospital facility in Berlin opened in July 2014 with 25 beds.

Data on adult involuntary admissions by fiscal year is presented in question A8b. Data for Medicaid-paid children's inpatient is included below.



| Medicaid Paid | | | | | |
|---------------------------------------|-------------|-----------|--|--|--|
| Children's Inpatient Hospitalizations | | | | | |
| | Admiss | sions | | | |
| Fiscal Year | Involuntary | Voluntary | | | |
| 2010 | 54 | 276 | | | |
| 2011 | 54 | 281 | | | |
| 2012 | 47 | 271 | | | |
| 2013 | 60 | 333 | | | |
| 2014 | 49 | 342 | | | |
| 2015 | 44 | 381 | | | |
| 2016 | 33 | 388 | | | |
| 2017 | 49 | 300 | | | |

Please note that almost all of the children waiting in the EDs under the commissioner's custody convert to voluntary at admission to inpatient. This chart shows how many children were initially under the custody of commissioner as part of their emergency room wait.

Finding: Children's MH-related inpatient admissions have grown over the years with a decrease in 2017 that may be related to staffing challenges at the Brattleboro Retreat.

Source: HHC **Q8a**: Has the percentage of [inpatient] admissions that are involuntary changed over time?

Q8b: Forensic evaluations?

+ Child/Adult breakout

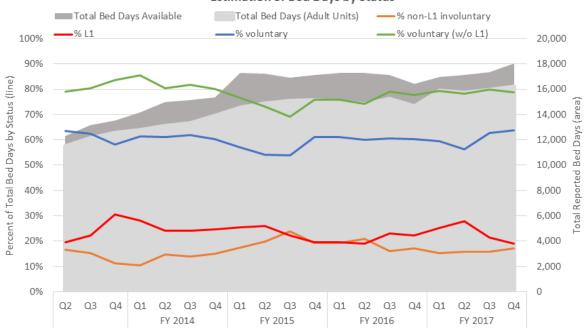
A8a:

DMH has matchable data on involuntary hospitalizations for adults, Medicaid-paid hospitalizations for adults, and Medicaid-paid hospitalizations for children. Private-paid hospitalizations are not accessible to DMH. This limitation means that DMH does not have enough information to arrive at the percentage of admissions.

However, using the electronic bed board, DMH is able to estimate the numbers of bed days used for each population—level 1, non-level 1 involuntary, and voluntary inpatient stays (below). The percentage of bed days for voluntary care has comprised anywhere from 55%-63%. When removing beds that exclusively used for involuntary care (Level 1 beds), this percentage is anywhere from 70%-85%. These percentages have changed over time with the addition of more Level 1 beds and changes in percent occupancy.



Vermont Adult Psychiatric Inpatient Beds Estimation of Bed Days by Status



A8b:

Data on forensic evaluations resulting in involuntary hospitalization are included below for each fiscal year. These data are collected by DMH care managers as part of tracking involuntary hospitalizations. Admissions include forensic commitments and revocations of orders of non-hospitalizations, which results in numbers being slightly different from figures reported in Question 3.

Emergency and Forensic Admissions by Fiscal Year



Vermont State Hospital and Designated Hospitals: Emergency and Forensic Admissions

| | | Emerger | ncy Exam | | | Forensic A | dmissions | | |
|------|-----|---------|----------|-------|-----|------------|-----------|-------|-------|
| | VSH | Level 1 | DH | Total | VSH | Level 1 | DH | Total | Total |
| 2002 | 121 | - | 206 | 327 | 95 | - | 0 | 95 | 422 |
| 2003 | 85 | - | 241 | 326 | 107 | - | 0 | 107 | 433 |
| 2004 | 96 | - | 261 | 357 | 104 | - | 0 | 104 | 461 |
| 2005 | 76 | - | 313 | 389 | 100 | - | 0 | 100 | 489 |
| 2006 | 108 | - | 296 | 404 | 75 | - | 0 | 75 | 479 |
| 2007 | 130 | - | 272 | 402 | 75 | - | 0 | 75 | 477 |
| 2008 | 162 | - | 252 | 414 | 95 | - | 0 | 95 | 509 |
| 2009 | 152 | - | 310 | 462 | 89 | - | 0 | 89 | 551 |
| 2010 | 173 | - | 335 | 508 | 84 | - | 0 | 84 | 592 |
| 2011 | 188 | - | 262 | 450 | 58 | - | 0 | 58 | 508 |
| 2012 | 24 | - | 426 | 450 | 13 | - | 44 | 57 | 507 |
| 2013 | - | 177 | 246 | 423 | - | 32 | 21 | 53 | 476 |
| 2014 | - | 126 | 265 | 391 | - | 27 | 24 | 51 | 442 |
| 2015 | - | 102 | 348 | 450 | - | 25 | 21 | 46 | 496 |
| 2016 | - | 110 | 356 | 466 | - | 30 | 32 | 62 | 528 |
| 2017 | - | 104 | 327 | 431 | - | 33 | 23 | 56 | 487 |

Source: HHC **Q9**: What is the trend line for length of inpatient stays? [And broken down for length of stay for involuntary patients, and forensic patients?]

+ Child/Adult breakout

A9:

DMH has matchable data on involuntary hospitalizations for adults, Medicaid-paid hospitalizations for adults, and Medicaid-paid hospitalizations for children. Private-paid hospitalizations are not accessible to DMH.

When examining LOS for involuntary adult hospitalizations (below), the LOS has increased over the period of 2011 to 2017. Forensics have longer LOS than civil holds (on avg) and there appear to be hospital differences in LOS.



Adult Involuntary Inpatient Stays by Calendar Year – Median and Average LOS for discharged patients

| Year | Median of LOS | Average of LOS |
|------|---------------|----------------|
| 2011 | 14.00 | 22.01 |
| 2012 | 18.00 | 31.68 |
| 2013 | 18.00 | 35.11 |
| 2014 | 20.00 | 45.72 |
| 2015 | 20.00 | 48.87 |
| 2016 | 17.00 | 40.15 |
| 2017 | 20.00 | 50.77 |

Adult Involuntary Inpatient Stays by Calendar Year – Average LOS for discharged patients by legal status

| Year | Civil | Forensic |
|------|-------|----------|
| 2011 | 21.66 | 27.11 |
| 2012 | 29.88 | 44.09 |
| 2013 | 31.70 | 49.51 |
| 2014 | 38.64 | 91.78 |
| 2015 | 38.90 | 43.47 |
| 2016 | 32.92 | 44.78 |
| 2017 | 34.36 | 59.82 |

Children's Medicaid-paid Inpatients stays

| Medicaid Paid Children's Inpatient Hospitalizations | | | | | | | | | |
|--|-------------|-----------|--|--|--|--|--|--|--|
| Average Length of Stay (Days) | | | | | | | | | |
| Fiscal Year | Involuntary | Voluntary | | | | | | | |
| 2010 | 18 | 13 | | | | | | | |
| 2011 | 17 | 13 | | | | | | | |
| 2012 | 19 | 12 | | | | | | | |
| 2013 | 17 | 13 | | | | | | | |
| 2014 | 18 | 15 | | | | | | | |
| 2015 | 20 | 14 | | | | | | | |
| 2016 | 12 | 14 | | | | | | | |
| 2017 | 13 | 17 | | | | | | | |



Source: HHC Q10: Is this data different among different hospitals?

+ Child/Adult breakout

A10:

Data on differences among hospitals is readily available for adult involuntary inpatients stays and is presented below. The question is not applicable for children as Brattleboro Retreat is the only instate inpatient unit for children and youth.

Adult Involuntary Inpatient Stays by Calendar Year – Average LOS for discharged patients by hospital

| Year | BR | CVMC | RRMC | UVMC | VA | VPCH | WC |
|------|-------|-------|-------|-------|-------|--------|-------|
| 2011 | 28.07 | 11.60 | 16.35 | 21.97 | | | 10.50 |
| 2012 | 40.16 | 18.48 | 28.69 | 25.00 | | | |
| 2013 | 44.92 | 13.02 | 28.45 | 37.67 | | 52.36 | 18.70 |
| 2014 | 57.50 | 18.71 | 36.14 | 34.11 | | 85.97 | 8.00 |
| 2015 | 49.55 | 35.07 | 36.38 | 30.69 | | 123.57 | 20.08 |
| 2016 | 42.49 | 20.94 | 25.99 | 29.38 | | 90.21 | 26.13 |
| 2017 | 42.18 | 40.24 | 28.36 | 33.63 | 18.60 | 148.31 | 20.71 |

Source: HHC Q11: Have there been any changes in the rates of rehospitalization?

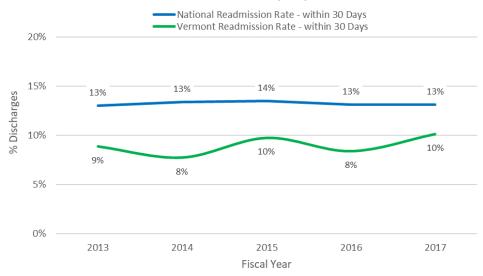
+ Child/Adult breakout

A11:

30-day readmission rates for adult involuntary stays have been consistent and below the national average. Please see the data below by fiscal year.







Source: HHC **Q12**: Among all inpatient beds in use, has the percentage being used by those on a court-order (forensic), those pending or post-commitment (involuntary), and voluntary patients, changed over that same time period?

+ Child/Adult breakout

A12:

Please see answers to Q7 and Q8.

Source: SHW **Q13**: In 2017, how many patients were held in a psychiatric hospital unit who no longer needed hospital level care (by month and region)? Of those patients held, what percent needed care in a geriatric or secure facility?

A13:

DMH does not collect this data for adult voluntary inpatient stays and is actively working with VAHHS, who may have sub-acute dates from their inpatient flow data pilot, as well as with DVHA, for sub-acute information that may be available as part of their prior authorization process. DVHA information is provided below for FY2017.

The Department of Vermont Health Access (DVHA) conducts prior authorizations for Medicaid-paid inpatient psychiatric stays. Patients "who no longer needed hospital level



care" is defined by inpatient stays with either sub-acute (SA) or awaiting placement (AP) days. Rates for sub-acute or awaiting placement are approved when lower level of care is appropriate for an individual but unavailable. A detailed review of member files by DHVA would be required to identify whether the sub-acute or awaiting placement days were due to a geriatric or secure residential facility being unavailable.

Medicaid-Paid Psychiatric Inpatient Admissions for Youth

Of a total of **341** youth psychiatric admissions paid by Medicaid, 87 (26%) had either awaiting placement or sub-acute days.

| F | FY 2017 – Youth Psychiatric Inpatient Admissions with Sub-Acute or Awaiting Placement Days | | | | | | | | | | | |
|-------|--|------|----|----------|-----------|-----------|-----------|----------|-----|------|--------------------|-------|
| | | | | | Catchmei | | | | | | | |
| | | | | (Does no | t indicat | e receive | d service | s from D | A) | | | Tatal |
| | СМС | CSAC | нс | HCRS | LCMH | NCSS | NKHS | RMHS | UCS | WCMH | Out of State | Total |
| Jul | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 3 |
| Aug | 1 | 0 | 0 | 2 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 6 |
| Sep | 0 | 0 | 1 | 6 | 0 | 1 | 0 | 2 | 0 | 2 | 0 | 12 |
| Oct | 0 | 0 | 2 | 5 | 0 | 1 | 0 | 2 | 0 | 0 | 0 | 10 |
| Nov | 1 | 0 | 0 | 2 | 0 | 2 | 0 | 1 | 1 | 1 | 0 | 8 |
| Dec | 1 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 6 |
| Jan | 0 | 1 | 2 | 2 | 0 | 0 | 2 | 3 | 1 | 1 | 0 | 12 |
| Feb | 0 | 2 | 1 | 2 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 8 |
| Mar | 0 | 0 | 1 | 3 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 8 |
| Apr | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 4 |
| May | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 5 |
| Jun | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 2 | 0 | 0 | 5 |
| Total | 3 | 4 | 10 | 28 | 0 | 8 | 4 | 14 | 8 | 8 | 0 | 87 |



Medicaid-Paid Psychiatric Inpatient Admissions for Adults

Of a total of 1,633 adult psychiatric admissions paid by Medicaid, 149 (9%) had either awaiting placement or sub-acute days.

| F | FY 2017 – Adult Psychiatric Inpatient Admissions with Sub-Acute or Awaiting Placement Days | | | | | | | | | | | |
|-------|--|------|----|----------|-------------------------|------------------------|-----------|----------|-----|------|--------------------|----------|
| | | | | | Catchmei | nt Area o | f Resider | nce | | | | |
| | | | | (Does no | <mark>ot indicat</mark> | <mark>e receive</mark> | d service | s from D | A) | | | T |
| | СМС | CSAC | нс | HCRS | LCMH | NCSS | NKHS | RMHS | ucs | WCMH | Out of State | Total |
| Jul | 0 | 1 | 2 | 6 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 11 |
| Aug | 0 | 0 | 6 | 5 | 1 | 2 | 0 | 3 | 0 | 2 | 0 | 19 |
| Sep | 0 | 0 | 4 | 7 | 1 | 1 | 0 | 1 | 0 | 4 | 0 | 18 |
| Oct | 0 | 0 | 3 | 6 | 2 | 0 | 0 | 2 | 2 | 0 | 0 | 15 |
| Nov | 2 | 1 | 2 | 5 | 0 | 0 | 1 | 0 | 2 | 2 | 0 | 15 |
| Dec | 1 | 0 | 2 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 5 |
| Jan | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 7 |
| Feb | 0 | 2 | 4 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 9 |
| Mar | 0 | 0 | 2 | 5 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 11 |
| Apr | 0 | 0 | 5 | 3 | 0 | 1 | 0 | 3 | 2 | 2 | 0 | 16 |
| May | 0 | 0 | 4 | 2 | 0 | 0 | 2 | 0 | 1 | 2 | 0 | 11 |
| Jun | 0 | 1 | 4 | 4 | 0 | 2 | 0 | 1 | 0 | 0 | 0 | 12 |
| Total | 3 | 5 | 38 | 49 | 4 | 7 | 5 | 14 | 8 | 16 | 0 | 149 |

^{*} Five (5) admissions had both AP and SA days.; unduplicated total admissions is 144.



^{*} two admissions had both AP and SA days; unduplicated total of admissions is 85. No members were discharged to Woodside.

OVERALL BED CAPACITY

Source: HHC **Q14**: It would also help to have a side-by-side of the number of treatment or therapeutic setting beds that we have had historically (10 years ago), and currently, at different levels of intensity: VSH or Level 1 inpatient; other general inpatient; Retreat inpatient; secure residential; intensive residential; crisis diversion; other supported/DA groups homes; supportive housing program.

A14:

DMH has this readily available from 2011 to current:

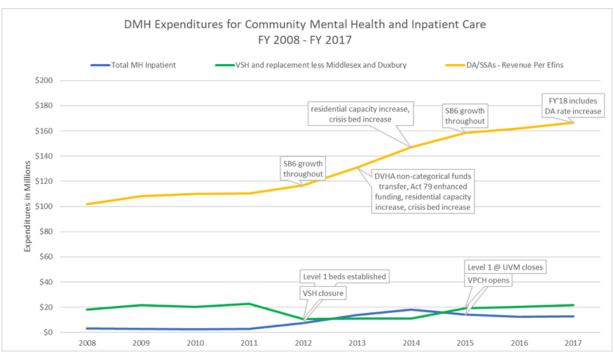
| | Numbers of Beds | | | | | | | | | | |
|----------------------------|-----------------|--------------------------------|------|------|------|------|--|--|--|--|--|
| | | September June July July Decem | | | | | | | | | |
| | Pre-Irene | 2012 | 2013 | 2014 | 2015 | 2017 | | | | | |
| Non Level 1 | 130 | 113 | 122 | 143 | 143 | 154 | | | | | |
| Level 1 | 54 | 31 | 35 | 45 | 45 | 45 | | | | | |
| Crisis Beds | 29 | 33 | 37 | 38 | 40 | 40 | | | | | |
| Secure Residential | 0 | 0 | 7 | 7 | 7 | 7 | | | | | |
| Peer Supported Residential | 0 | 0 | 0 | 0 | 5 | 5 | | | | | |
| Intensive Residential | 20 | 36 | 36 | 42 | 42 | 42 | | | | | |
| Springfield Secure Unit | 0 | 5 | 0 | 0 | 0 | 0 | | | | | |
| Total | 233 | 218 | 237 | 275 | 282 | 293 | | | | | |

INPATIENT VS. COMMUNITY SPEND

Source: **Q15**: Finally, from a fiscal perspective, do we have a trendline [10 years] for expenditures in inpatient versus community programs during a similar time span?

A15:





Note- Increases for Success Beyond Six are increases in local and federal matching funds. These do not represent an increase in general fund expenditures.

EXPEDITED CASES

Source: **Q16**: How many cases were expedited (by month) in 2016 and 2017?

SHW

A16:

| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sept | Oct | Nov | Dec | Total |
|------|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|-------|
| 2016 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 2 | 1 | 6 |
| 2017 | 1 | 1 | 2 | 1 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 9 |

COMMITMENT AND INVOLUNTARY MEDICATION

Source: SHW **Q17**: How many unique cases of commitment and involuntary medication occurred in 2017 (by month)?



A17:

In FY 2017, the legal division switched from manual spreadsheet capture to data capture using law manager, the document management software used by the AGs office. DMH is still working with the AGs office to develop a standardized extract so figures may change as the process is refined.

Numbers of outpatient commitments (ONH, orders of non-hospitalization), involuntary medication filings (IVMS), and orders of hospitalization (OHs) are included below.

| | | 2016 | | | | | | | | | | 2017 | | | | | |
|-------|-----|------|------|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|------|-----|-----|
| | Jul | Aug | Sept | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sept | Oct | Nov |
| #ONHs | 26 | 25 | 20 | 18 | 38 | 30 | 30 | 25 | 31 | 15 | 35 | 24 | 24 | 26 | 20 | 16 | 4 |
| #IVMs | 8 | 5 | 5 | 6 | 7 | 3 | 7 | 2 | 7 | 7 | 3 | 7 | 11 | 9 | 9 | 11 | 2 |
| #OHs | | | | | | | 5 | 3 | 8 | 7 | 4 | 7 | 10 | 11 | 11 | 9 | 7 |

Source: SHW **Q18**: What was the average wait time for commitment and involuntary medication in expedited cases in 2017?

A18:

In FY 2017, the average time from involuntary medication filing date to medication decision date for expedited cases was 7.25 days.

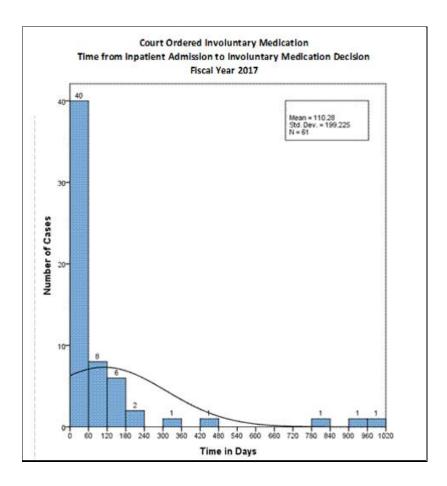
Source: SHW **Q19**: What was the average wait time for commitment and involuntary medication in non-expedited cases in 2017?

A19:

The average time from involuntary medication filing date to medication decision date for non-expedited cases was 11.28 days.

DMH has reports on total time from admission to involuntary medication decision for FY 17, presented below.





This graph illustrates all initial cases (61) filed for involuntary medication in FY 2017. The average (mean) length of time between an admission to the hospital and to the medication decision is approximately 110 days, with a small number of outliers on the longer end of the curve. This illustrates the variability in this measure across time and jurisdictions, with approximately 65% of cases resolved in less than 60 days and 78% of cases resolved in less than 120 days. When removing the four outliers, the average time between admission to decision is approximately 62 days.

COURT ORDERED (FORENSIC)

Source: SHW **Q20**: In 2017 and 2016, what percentage of persons in the involuntary system are arriving as a court-ordered (forensic) referral (by month)?

A20:

See answers to questions 3 and 8 for answers by year. We included the information as numbers since the percentages would be very small. Breakouts that are smaller than annual figures may not



be good indications of trends. Please note that this data includes forensic commitments as well as forensic observations. Data for forensic observations only can be found in question 3.

| Calendar | | Number of Forensic Admissions by month | | | | | | | | | | | |
|----------|-----|--|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|
| Year | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Total |
| 2017 | 3 | 4 | 2 | 5 | 3 | 6 | 5 | 4 | 6 | 6 | 7 | 2 | 53 |
| 2016 | 4 | 6 | 5 | 4 | 6 | 7 | 7 | 4 | 8 | 9 | 2 | 4 | 66 |

Source: SHW Q21: Why are there openings in the MH docket?

A21:

There is court time that is reserved for mental health cases in the family court that is not used. This happens because the courts set blocks of cases for certain days of the week (Chittenden on Mondays, Rutland and Windham on Fridays, etc.). DMH may choose not to move forward on a case (go to hearing on it) because the patient may be taking medication and improving. If that's true, there is minimal incentive to have a hearing, as the person may be able to leave the hospital without a commitment (or be put on a stipulated ONH upon discharge). DMH primarily pushes for hearings when a patient is refusing medications.

Source: SHW **Q22**: How long on average does it take for an independent psychiatric evaluation (§ 7614) to occur once it has been ordered by the court?

A22:

Based on 2017 data, it takes 8-9 days (8.63 mean, 7 median) for an independent psychiatric evaluation to occur for inpatient orders by the court.



FACILITIES REPORT

QUESTIONS FOR DEPARTMENT OF MENTAL HEALTH

DMH POPULATION NUMBERS

Source: Q1: Number of patients at VPCH and average length of stay – if possible, also, numbers of

folks who have mental health needs and criminal justice involvement

HCCI

A1:

| Calendar Year | Number of Discharges | Average LOS |
|------------------|-------------------------|----------------|
| 2014 | 37 | 84 |
| 2015 | 55 | 122 |
| 2016 | 59 | 89 |
| 2017 | 71 | 145 |
| Total | 222 | 115 |

Forensic admissions below are defined as those admitted as a forensic commitment or under a court-order for forensic observation.

| Calendar | Number of Forensic Admissions by month | | | | | | | | | | | | |
|----------|--|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|
| Year | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Total |
| 2017 | 3 | 4 | 2 | 5 | 3 | 6 | 5 | 4 | 6 | 6 | 7 | 2 | 53 |
| 2016 | 4 | 6 | 5 | 4 | 6 | 7 | 7 | 4 | 8 | 9 | 2 | 4 | 66 |

Source: Q2: Number of patients at Middlesex Therapeutic Community Residence (MTCR) and

average length of stay

HCCI

A2:

| Calendar Year | Number Served during Year | Number of Discharges | Average LOS | |
|------------------|------------------------------|----------------------|----------------|--|
| 2013 | 11 | 5 | 129 | |
| 2014 | 18 | 11 | 150 | |
| 2015 | 16 | 11 | 226 | |
| 2016 | 11 | 5 | 244 | |



| Total | 15 | 9 | 226 |
|-------|----|---|-----|
| 2017 | 15 | 0 | 360 |

Source: Q3: Number of patients waiting in EDs and average length of stay

HCCI

A3:

Mean and Median Wait Time
Inpatient Placement for Adult Emergency Exams, Warrants, and Forensic Observations

| Year | Month | Avg # Waiting Per Day | Mean Wait Time | Median Wait Time | |
|------|-------|-----------------------------|-------------------|---------------------|--|
| | Jan | 4 | 43 | 21 | |
| | Feb | 2 | 30 | 25 | |
| | Mar | 4 | 51 | 21 | |
| | Apr | 2 | 37 | 17 | |
| | May | 3 | 27 | 15 | |
| 2016 | Jun | 5 | 49 | 23 | |
| 2016 | Jul | 4 | 43 | 22 | |
| | Aug | 8 | 79 | 41 | |
| | Sep | 4 | 77 | 74 | |
| | Oct | 7 | 78 | 56 | |
| | Nov | 6 | 79 | 28 | |
| | Dec | 5 | 77 | 45 | |
| | Jan | 4 | 63 | 45 | |
| | Feb | 4 | 45 | 27 | |
| | Mar | 4 | 60 | 40 | |
| | Apr | 5 | 56 | 33 | |
| | May | 6 | 76 | 54 | |
| 2017 | Jun | 5 | 48 | 28 | |
| 2017 | Jul | 8 | 75 | 52 | |
| | Aug | 9 | 95 | 68 | |
| | Sep | 11 | 135 | 70 | |
| | Oct | 10 | 106 | 70 | |
| | Nov | 6 | 105 | 62 | |
| | Dec | 2 | 41 | 28 | |
| 2018 | Jan | 3 | 52 | 32 | |
| 2010 | Feb | 2 | 41 | 22 | |

