

# Forensic Psychiatric Inpatients Served in the United States: Regional and System Differences

Bruce B. Way, MA; Joel A. Dvoskin, PhD; and Henry J. Steadman, PhD

This research note presents data about regional and system variations in psychiatric inpatient services for forensic patients provided in state operated psychiatric inpatient programs in the United States in 1986. Patient census by legal status and service provision information were collected from state forensic directors. In 1986, about 5,400 patients found not guilty by reason of insanity (NGRI) and 3,200 patients found incompetent to stand trial (IST) were being served in state operated inpatient units. About 70 percent of both groups were being served in designated forensic beds. There were wide differences among the states in the volume and rates for NGRI, IST, forensic exams, and dangerous civil patients (DCP). The regional analyses revealed large variability among states within each region.

Administrators of public forensic mental health programs have traditionally been forced to plan services in the absence of reliable national data on the volume and rates of various forensic cases across various states. Such comparative data can be extremely useful in shaping and defending budget requests, developing new programs, and guiding the development of multi-year statewide planning documents. Equally important is the use of such information in responding to inaccurate public perceptions, such as the

supposed high number of insanity acquittals. For example, comparative data could have been useful as states struggled to fine tune their insanity defense laws in the wake of public reaction to John W. Hinckley's attempted assassination of President Reagan in 1981.<sup>1</sup>

Increasing the importance of these data is the continuing decrease in the capacity and census of state civil psychiatric centers,<sup>2,3</sup> which have dramatically increased the *percentage* of total state inpatient beds used for forensic patients. For those states whose forensic mental health systems provide services to mentally ill prison inmates, the rise in the U.S. state prison population of 115 percent between 1980 and 1989<sup>4</sup> has also increased the importance of forensic

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Mr. Way is affiliated with the Bureau of Evaluation and Services Research, New York State Office of Mental Health, Albany; Dr. Dvoskin is affiliated with the Bureau of Forensic Services, New York State Office of Mental Health, Albany; and Dr. Steadman is affiliated with Policy Research Associates, Albany, New York.

services within state mental health systems.

This note reports the number and rates of individuals served under certain legal statuses in psychiatric inpatient beds operated by state mental health agencies in the United States. The data were collected as part of a study conducted under the auspices of the Association of State Mental Health Forensic Directors (SMHFD), a Division of the National Association of State Mental Health Program Directors (NASMHPD).

There have been five prior attempts to collect nationwide information concerning forensic inpatient populations and services.<sup>5-9</sup> No one, however, has presented information concerning state and regional differences in volume and rates of service nor examined the relative proportion of patients under various legal statuses being served in civil versus designated forensic beds.

### Method

A survey instrument was sent to state mental health forensic directors in the 50 states and the District of Columbia. Respondents were asked to report information concerning inpatient services provided to forensic patients in both designated forensic beds and civil hospital beds. Information was collected from all 51 respondents. Forensic patients were defined to include the following legal status categories: (1) not guilty by reason of insanity; (2) guilty but mentally ill; (3) incompetent to stand trial; (4) inpatient forensic exams; (5) danger-

ous civil patients\*; and (6) transfers from state corrections or local corrections. The survey also collected staffing information concerning specially designated forensic inpatient beds which was previously reported.<sup>10</sup> All the figures were based on a single day, most of which were in the spring of 1986. Except for St. Elizabeth's hospital in Washington, DC, only beds operated by state mental health agencies were included in the analysis. All information was returned to the respondents for verification, and in some cases further clarification was obtained by telephone.

### Results

Table 1 contains statewide census and rates per 100,000 population figures, displayed by U.S. region, for several legal status categories. Censuses in the guilty but mentally ill category were too infrequent for display. Due to definitional disparities across jurisdictions, data regarding transfers from local and state correctional institutions were considered ambiguous and incomplete and are therefore also not reported here.

Table 2 reports whether the inpatient service was provided in a civil or a designated forensic bed. Only the NGRI and IST legal statuses are displayed since only 12 states reported providing forensic exams in civil units and the danger-

\* By dangerous civil patients we mean only those civil committees found to be so dangerous as to require transfer to a designated forensic hospital or unit. Thus, by definition, our data can show no dangerous civil patients being treated in civil hospitals. Of course, many states, including New York, also operate nonforensic secure or locked units within civil hospitals.

**Table 1**  
**Census Rates per 100,000 by Legal Status: All Beds**

U.S. Region	State	State Pop. in 100,000 (7/1/86)§	Not Guilty by Reason of Insanity Census	NGRI Rate	Incompetent to Stand Trial (IST) Census	IST Rate	Forensic Inpatient Exams Census	Exam Rate	Dangerous*	
									Civil Census	Civil Rate
New England	Connecticut	31.89	210.00	6.59	93.00	2.92	12.00	.38	17.00	.53
	Maine	11.74	31.00	2.64	4.00	.34	4.00	.34	8.00	.68
	Massachusetts	58.32	61.00	1.05	49.00	.84	50.00	.86	99.00	1.70
	New Hampshire	10.27	14.00	1.36	0.00	0.00	6.00	.58	3.00	.29
	Rhode Island	9.75	8.00	.82	2.00	.21	6.00	.62	0.00	0.00
	Vermont	5.41	26.00	4.81	0.00	0.00	15.00	2.77	0.00	0.00
	Regional totals	127.38	350.00	2.75	148.00	1.16	93.00	.73	127.00	1.00
Middle Atlantic	New Jersey	76.20	173.00	2.27	22.00	.29	6.00	.08	22.00	.29
	New York	177.72	450.00	2.53	302.00	1.70	17.00	.10	83.00	.47
	Pennsylvania	118.89	67.00	.56	64.00	.54	10.00	.08	17.00	.14
	Regional totals	372.81	690.00	1.85	388.00	1.04	33.00	.09	122.00	.33
East North Central	Illinois	115.53	235.00	2.03	196.00	1.70	0.00	0.00	194.00	1.68
	Indiana	55.04	20.00	.36	116.00	2.11	2.00	.04	31.00	.56
	Michigan	91.45	84.00	.92	62.00	.68	1.00	.01	101.00	1.10
	Ohio	107.52	245.00	2.28	257.00	2.39	2.00	.02	25.00	.23
	Wisconsin	47.85	160.00	3.34	40.00	.84	3.00	.06	14.00	.29
Regional totals	417.39	744.00	1.78	671.00	1.61	8.00	.02	365.00	.87	
West North Central	Iowa	28.51	1.00	.04	22.00	.77	1.00	.04	1.00	.04
	Kansas	24.61	37.00	1.50	18.00	.73	31.00	1.26	0.00	0.00
	Minnesota	42.14	17.00	.40	4.00	.09	9.00	.21	138.00	3.27
	Missouri	50.66	317.00	6.26	49.00	.97	42.00	.83	12.00	.24
	Nebraska	15.98	21.00	1.31	6.00	.38	0.00	0.00	45.00	2.82
	N. Dakota	6.79	4.00	.59	6.00	.88	8.00	1.18	2.00	.29
	S. Dakota	7.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Regional totals	175.77	397.00	2.26	105.00	.60	91.00	.52	198.00	1.13
South Atlantic	Delaware	6.33	11.00	1.74	4.00	.63	5.00	.79	0.00	0.00
	Florida	116.75	273.00	2.34	427.00	3.66	0.00	0.00	7.00	.06
	Georgia	61.04	89.00	1.46	25.00	.41	12.00	.20	0.00	0.00
	Maryland	44.63	295.00	6.61	59.00	1.32	79.00	1.77	21.00	.47
	N. Carolina	63.31	5.00	.08	25.00	.39	60.00	.95	0.00	0.00
	S. Carolina	33.78	2.00	.06	49.00	1.45	20.00	.59	0.00	0.00
	Virginia†	57.87	44.00	.76	23.00	.40	17.00	.29	4.00	.07
	W. Virginia	19.19	0.00	0.00	11.00	.57	10.00	.52	5.00	.26

Table 1, continued

	Washington, DC†	6.26	386.00	61.66	18.00	2.88	25.00	3.99	11.00	1.76
	Regional totals	409.16	1,105.00	2.70	641.00	1.57	228.00	.56	48.00	.12
East South Central	Alabama	40.53	67.00	1.65	58.00	1.43	50.00	1.23	6.00	.15
	Kentucky	37.28	0.00	0.00	10.00	.27	35.00	.94	0.00	0.00
	Mississippi	26.25	3.00	.11	3.00	.11	15.00	.57	12.00	.46
	Tennessee	48.03	43.00	.90	42.00	.87	44.00	.92	2.00	.04
	Regional totals	152.09	113.00	.74	113.00	.74	144.00	.95	20.00	.13
West South Central	Arkansas	23.72	11.00	.46	42.00	1.77	20.00	.84	3.00	.13
	Louisiana	45.01	109.00	2.42	97.00	2.16	0.00	0.00	22.00	.49
	Oklahoma	33.05	23.00	.70	50.00	1.51	5.00	.15	0.00	0.00
	Texas	166.82	49.00	.29	274.00	1.64	0.00	0.00	30.00	.18
	Regional totals	268.60	192.00	.71	463.00	1.72	25.00	.09	55.00	.20
Mountain	Arizona	33.17	6.00	.18	0.00	0.00	0.00	0.00	54.00	1.63
	Colorado	32.67	242.00	7.41	57.00	1.74	22.00	.67	10.00	.31
	Idaho	10.03	20.00	1.99	18.00	1.79	1.00	.10	0.00	0.00
	Montana	8.19	8.00	.98	10.00	1.22	10.00	1.22	55.00	6.72
	Nevada	9.63	0.00	0.00	27.00	2.80	0.00	0.00	1.00	.10
	New Mexico	14.79	0.00	0.00	36.00	2.43	20.00	1.35	3.00	.20
	Utah	16.65	5.00	.30	6.00	.36	9.00	.54	1.00	.06
	Wyoming	5.07	7.00	1.38	0.00	0.00	5.00	.99	8.00	1.58
	Regional totals	130.20	288.00	2.21	154.00	1.18	67.00	.51	132.00	1.01
Pacific	Alaska	5.34	20.00	3.75	3.00	.56	0.00	0.00	4.00	.75
	California	269.81	860.00	3.19	477.00	1.77	0.00	0.00	151.00	.56
	Hawaii	10.62	116.00	10.92	7.00	.66	20.00	1.88	0.00	0.00
	Oregon	26.98	271.00	10.04	23.00	.85	6.00	.22	31.00	1.15
	Washington	44.63	278.00	6.23	11.00	.25	19.00	.43	2.00	.04
	Regional totals	357.38	1,545.00	4.32	521.00	1.46	45.00	.13	188.00	.53
	U.S. Totals	2,410.78	5,424.00	2.25	3,204.00	1.33	734.00	.30	1,255.00	.52

\* Includes only dangerous civil in forensic beds.

† Information incomplete for non-forensic beds.

‡ Includes federal patients.

§ Estimates from 1986-87 NYS Statistical Yearbook, State University of New York, 1987.

**Table 2**  
**Legal Status Censuses**

U.S. Region	State	Not Guilty by Reason of Insanity				Incompetent to Stand Trial			
		Forensic		Civil		Forensic		Civil	
		N	%	N	%	N	%	N	%
New England	Connecticut	29	(13.8)	181	(86.2)	4	(4.3)	89	(95.7)
	Maine	28	(90.3)	3	(9.7)	4	(100.0)	0	(0.0)
	Massachusetts	36	(59.0)	25	(41.0)	39	(79.6)	10	(20.4)
	New Hampshire	10	(71.4)	4	(28.6)	0	(0.0)	0	(0.0)
	Rhode Island	6	(75.0)	2	(25.0)	2	(100.0)	0	(0.0)
	Vermont	8	(30.8)	18	(69.2)	0	(0.0)	0	(0.0)
	Regional Totals	117	(33.4)	233	(66.6)	49	(33.1)	99	(66.9)
Mid-Atlantic	New Jersey	27	(15.6)	146	(84.4)	10	(45.5)	12	(54.5)
	New York	243	(54.0)	207	(46.0)	176	(58.2)	126	(41.8)
	Pennsylvania	22	(32.8)	45	(67.2)	43	(67.2)	21	(32.8)
	Regional totals	292	(42.3)	398	(57.7)	229	(59.0)	159	(41.0)
East North Central	Illinois	200	(85.1)	35	(14.9)	196	(100.0)	0	(0.0)
	Indiana	5	(25.0)	15	(75.0)	16	(13.8)	100	(86.2)
	Michigan	84	(100.0)	0	(0.0)	62	(100.0)	0	(0.0)
	Ohio	45	(18.4)	200	(81.6)	74	(28.8)	183	(71.2)
	Wisconsin	159	(99.4)	1	(0.6)	39	(97.5)	1	(2.5)
	Regional totals	493	(66.3)	251	(33.7)	387	(57.7)	284	(42.3)
West North Central	Iowa	0	(0.0)	1	(100.0)	2	(9.1)	20	(90.9)
	Kansas	27	(73.0)	10	(27.0)	13	(72.2)	5	(27.8)
	Minnesota	17	(100.0)	0	(0.0)	4	(100.0)	0	(0.0)
	Missouri	159	(50.2)	158	(49.8)	22	(44.9)	27	(55.1)
	Nebraska	21	(100.0)	0	(0.0)	6	(100.0)	0	(0.0)
	N. Dakota	0	(0.0)	4	(100.0)	1	(16.7)	5	(83.3)
	S. Dakota	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
	Regional totals	224	(56.4)	173	(43.6)	48	(45.7)	57	(54.3)
South Atlantic	Delaware	3	(27.3)	8	(72.7)	3	(75.0)	1	(25.0)
	Florida	208	(76.2)	65	(23.8)	368	(86.2)	59	(13.8)
	Georgia	57	(64.0)	32	(36.0)	19	(76.0)	6	(24.0)
	Maryland	182	(61.7)	113	(38.3)	16	(27.1)	43	(72.9)
	N. Carolina	0	(0.0)	5	(100.0)	0	(0.0)	25	(100.0)
	S. Carolina	2	(100.0)	0	(0.0)	19	(38.8)	30	(61.2)
	Virginia*	44	(100.0)	0	(0.0)	23	(100.0)	0	(0.0)
	W. Virginia	0	(0.0)	0	(0.0)	6	(54.5)	5	(45.5)

Table 2, continued

	Washington, DC†	316	(81.9)	70	(18.1)	18	(100.0)	0	(0.0)
	Regional totals	812	(73.5)	293	(26.5)	472	(73.6)	169	(26.4)
East South Central	Alabama	39	(58.2)	28	(41.8)	40	(69.0)	18	(31.0)
	Kentucky	0	(0.0)	0	(0.0)	0	(0.0)	10	(100.0)
	Mississippi	3	(100.0)	0	(0.0)	3	(100.0)	0	(0.00)
	Tennessee	7	(16.3)	36	(83.7)	18	(42.9)	24	(57.1)
	Regional totals	49	(43.4)	64	(56.6)	61	(54.0)	52	(46.0)
West South Central	Arkansas	11	(100.0)	0	(0.0)	42	(100.0)	0	(0.0)
	Louisiana	109	(100.0)	0	(0.0)	97	(100.0)	0	(0.0)
	Oklahoma	0	(0.0)	23	(100.0)	26	(52.0)	24	(48.0)
	Texas	30	(61.2)	19	(38.8)	241	(88.0)	33	(12.0)
	Regional totals	150	(78.1)	42	(21.9)	406	(87.7)	57	(12.3)
Mountain	Arizona	5	(83.3)	1	(16.7)	0	(0.0)	0	(0.0)
	Colorado	223	(92.1)	19	(7.9)	49	(86.0)	8	(14.0)
	Idaho	12	(60.0)	8	(40.0)	10	(55.6)	8	(44.4)
	Montana	0	(0.0)	8	(100.0)	4	(40.0)	6	(60.0)
	Nevada	0	(0.0)	0	(0.0)	27	(100.0)	0	(0.0)
	New Mexico	0	(0.0)	0	(0.0)	35	(97.2)	1	(2.8)
	Utah	3	(60.0)	2	(40.0)	6	(100.0)	0	(0.0)
	Wyoming	2	(28.6)	5	(71.4)	0	(0.0)	0	(0.0)
	Regional totals	245	(85.1)	43	(14.9)	131	(85.1)	23	(14.9)
Pacific	Alaska	18	(90.0)	2	(10.0)	3	(100.0)	0	(0.0)
	California	724	(84.2)	136	(15.8)	454	(95.2)	23	(4.8)
	Hawaii	66	(56.9)	50	(43.1)	5	(71.4)	2	(28.6)
	Oregon	267	(98.5)	4	(1.5)	23	(100.0)	0	(0.0)
	Washington	278	(100.0)	0	(0.0)	11	(100.0)	0	(0.0)
	Regional totals	1,353	(87.6)	192	(12.4)	496	(95.2)	25	(4.8)
	U.S. totals	3,735	(68.9)	1,689	(31.1)	2,279	(71.1)	925	(28.9)

\* Information incomplete for civil beds.

† Includes federal patients.

## Forensic Psychiatric Inpatients

ous civil patients, by definition, are only served in forensic beds.

***Not Guilty by Reason of Insanity (NGRI)*** There were 5,424 NGRI patients being served as inpatients in the United States on one day in 1986. Adjusted to population figures, this is a rate of 2.2 per 100,000 people. The provision of service to this type of patient by state mental health systems was nearly universal, with only five states reporting no NGRI patients. Three of these five, states, however, reported guilty but mentally ill patients.

There was considerable variation in the number of NGRIs served among states: several reported less than five patients and California reported 860. After the numbers were adjusted by population, variation among the states ranged from a high of nearly 62 per 100,000 in Washington, DC, to zero in a few states.

There also was variation in NGRI rate between U.S. regions. The Pacific region had consistently higher rates while the southern regions had lower rates. However, there was sizable variation among state rates within each regional cluster.

Displayed in Table 2, 69 percent of the NGRI inpatient services were provided in designated forensic units. However, a large number were also served in civil beds. Again, there was large variation among the states. Some states served all of their NGRIs in civil units, and some states served them exclusively in forensic beds. With such state level differences, meaningful regional trends did not emerge.

### ***Incompetent to Stand Trial (IST)***

The United States had a one day census of 3,204 IST inpatients. The rate was 1.33 patients per 100,000 population. As with NGRI, all but five states reported providing service to this population within their mental health system.

The IST censuses and rates varied between the states. California had the largest number with 477 patients while some states had just a handful or none. The IST rates per 100,000 population varied from 3.66 in Florida to zero. Due to variations within each region, the regional analysis did not show important differences in IST rates.

Presented in Table 2, 71 percent of the IST inpatients were served in designated forensic inpatient beds. There was great variability among the states, with some states serving all the IST clients in forensic facilities and others serving them all in civil hospital units. Due to such wide variation no regional trends emerged.

## Forensic Exams

There were 734 inpatients receiving forensic exams on a day in 1986. Ten of the states had no inpatient census for forensic exams. Similar to other legal statuses there was great variability among the states in the number of patients and the rates of patients served. In absolute numbers, states varied from 79 to zero individuals.

## Dangerous Civil Patients (DCP)

One thousand two-hundred fifty-five civil patients were being served in designated forensic beds. Twelve of the states did not report dangerous civil pa-

tients in inpatient forensic beds. The states range from a high of 194 in Illinois to zero. The highest rate per population was 6.7 per 100,000 in Montana.

### Discussion

Perhaps the most interesting finding of this study is the lower rates of inpatient beds utilized for NGRIs in both the east south central and west south central regions. Furthermore, with the exception of Florida (2.34) and Louisiana (2.42), all of the southern states were well below the national rate (2.25). The meaning of this pattern is unclear. One hypothesis is that these states, many of whom are known for relatively harsh prison systems, are places whose religious values stress personal responsibility and punishment for crimes. Interestingly, however, no southern state has abolished the insanity defense, perhaps because their low utilization rates have rendered the issue unimportant.

The extraordinarily high utilization rate of NGRi for the District of Columbia is also interesting. The most likely explanation is the fact that many of the District's insanity acquitees are misdemeanants. Nevertheless, the fact that over 81 percent of their NGRi patients are housed in a forensic unit may suggest that even misdemeanor NGRi patients are being treated as dangerous.

When presenting budget requests to legislative and oversight agencies, forensic directors are frequently asked to place their own service delivery systems within a national context. These data will provide forensic administrators with a means of responding to such requests.

Similarly, critics of state mental health systems require data such as these to more knowledgeably assess their state's response to crime among persons with

mental illness. Patient advocacy groups frequently complain that too few mentally ill defendants are afforded NGRi verdicts, while law and order proponents may claim that far too many criminals are "beating the rap" by pleading insanity. In both cases, it is useful to look within a national context in order to more fairly assess these issues.

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