Released, Relapsed, Rehospitalized

Length of Stay and Readmission Rates in State Hospitals

A Comparative State Survey

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LENGTH OF STAY AND READMISSION RATES IN STATE HOSPITALS

A COMPARATIVE STATE SURVEY

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EXECUTIVE SUMMARY

Psychiatric hospitalization remains an essential element in the continuum of mental health care for patients in psychiatric crisis.[1,2,3,4] At a minimum, intensive care in a psychiatric bed allows time for stabilization of acute psychiatric symptoms, much as intensive care in a cardiac bed promotes stabilization of acute cardiac symptoms.[5]

In the era of state mental hospital closures that began in the mid-1900s and has continued without pause through today, the number of state psychiatric beds for such care has plunged more than 96%. In 1955, the peak of state hospitalization, there were 560,000 beds available for an estimated 3.3 million American adults living with serious mental illness and other disabilities. By early 2016, there were slightly fewer than 38,000 beds for 8.1 million people with the same conditions.[6,7,8,9]

"Reduction in LOS has resulted in a concern about 'quicker but sicker' with regard to psychiatric patients' continuing acute symptoms and need for intensive nursing services at hospital discharge."

J.S. Lyons et al.
Predicting readmission to the psychiatric hospital in a managed care environment: Implications for quality indicators.
American Journal of Psychiatry (1997)

The difference between the number of people who need intensive care to begin recovery and the number of beds available to serve them is more chasm than gap — a bed shortage of unparalleled proportions. Those without access to a bed often end up waiting for hospital admission in emergency rooms, or in jail cells following arrest, or never receiving hospital care at all.[10] At the same time, families, communities, taxpayers and public agencies are affected by common consequences of untreated serious mental illness such as increased risk for homelessness, incarceration, violence and others.

Releasing patients faster creates more bed capacity without requiring new beds. Unsurprisingly, given widespread psychiatric bed shortages and pressure on hospitals to reduce hospitalization costs, length of stay (LOS) has been shrinking for decades. In 1980, the median LOS for an acute episode of schizophrenia was 42 days.[11] By 2013, it was an estimated seven days.[12]

At the same time, the rate at which psychiatric patients are readmitted following discharge has been rising.[13,14,15] In short, ever more people are competing for an ever-smaller number of inpatient beds. Once admitted, they stay ever-shorter periods of time. And, after discharge, they are ever more likely to relapse and be readmitted within weeks or a few months.

Rehospitalization is viewed clinically as a "poor outcome." Psychiatric patients who are rehospitalized experience reduced continuity of care and quality of life compared with those who are not. Their caretakers are often demoralized.[16]

Rehospitalization is also costly, and rehospitalization for serious mental illness is especially costly. Schizophrenia and mood disorders, including bipolar, account for more readmissions of Medicaid patients than any other medical conditions.[17] Schizophrenia hospitalization alone cost $11.5 billion in 2013, of which $646 million resulted from readmission within 30 days of discharge.[18,19] The Centers for Medicare & Medicaid Services (CMS) Hospital Readmissions Reduction Program has already begun penalizing hospitals for "excess" Medicare readmissions for some conditions. There is no reason to believe similar sanctions will not be forthcoming for "excess" Medicaid rehospitalization.

"It is especially important to examine the quality of care provided in hospitals with short vs long LOS. If hospitals achieve shorter LOS by discharging patients too early, it is quite possible that those hospitals have higher readmission rates."

J. S. Harman et al.
Profiling hospitals for length of stay for treatment of psychiatric disorders.
Journal of Behavioral Health Services and Research (2004)

Any number of factors impact hospital readmission, many of them unrelated to clinical aspects of hospitalization.[20,21] For example, a diagnosis of schizophrenia, the most disabling mental illness, increases the risk of readmission.[22] Inadequate bed supplies or restrictive bed-access policies reduce readmissions simply by rendering beds unavailable, irrespective of clinical circumstances. Meanwhile, access to robust outpatient and other services following discharge is reported to lower the risk of rapid rehospitalization.[23,24]

One clinical factor that has been subjected to repeated academic examination for its possible role in hospital readmission is the question of what role psychiatric length of stay plays in hospital readmission: Does reducing LOS increase the rate of rehospitalization by releasing patients at risk for relapse because they are not fully stabilized?

To date, no consensus or evidence-based guidance has emerged. Studies of the association typically have been limited to individual patients in single hospitals or regional systems, rather than populations. Since the turn of the century, research has rarely considered the experience of public hospitals, where the most severely ill patients are treated at public expense. Resulting findings and conclusions have been inconclusive or contradictory.

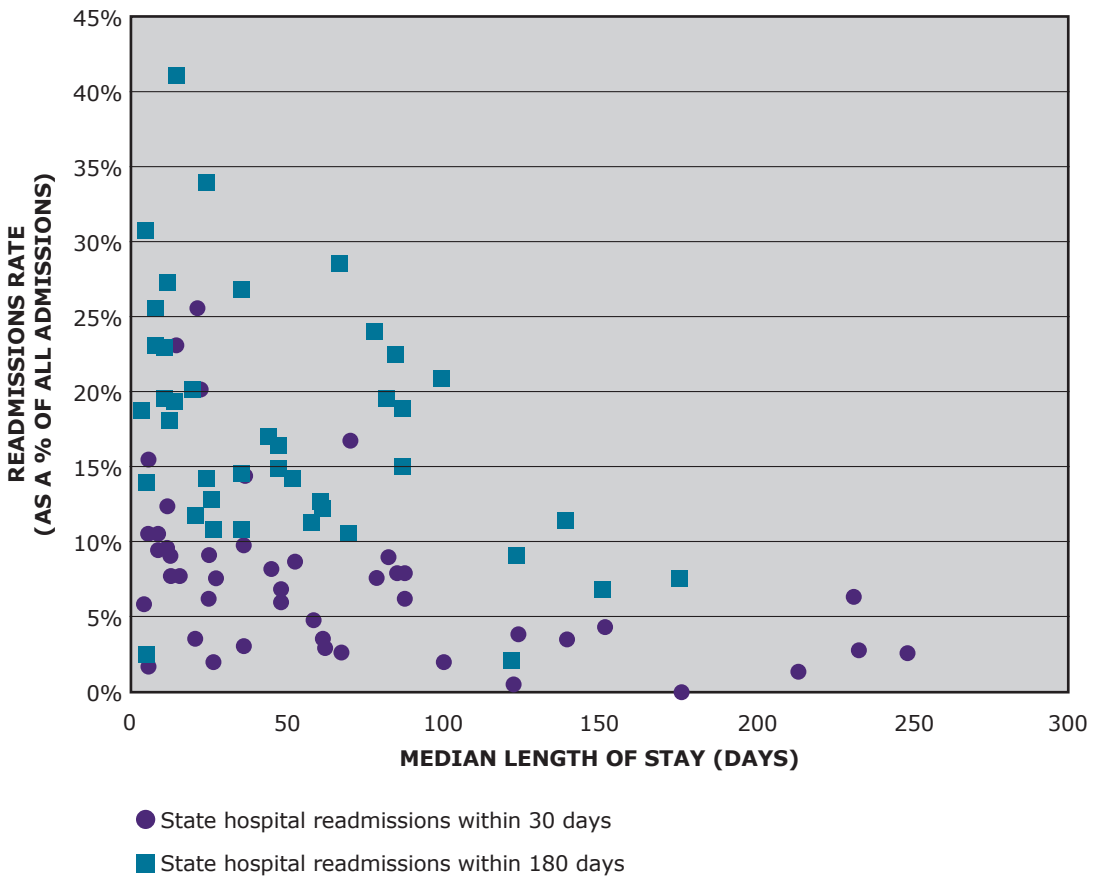
To analyze psychiatric LOS and rehospitalization rates in a large population of patients being discharged from comparable facilities, the authors performed a novel comparative analysis of state hospital data for fiscal year 2015. The data were reported to the Substance Abuse and Mental Health Services Administration (SAMHSA) as a condition of receiving federal block grant funds.[25] They included LOS for discharged adult patients in 45 states and the District of Columbia and 30- and 180-day readmission rates in the same states.

The analysis found a statistically significant association between shorter hospital stays and rapid rehospitalization across the states. Among the findings:

- Patients in states with the shortest LOS were nearly three times more likely to be readmitted into a state hospital within 30 days or 180 days of discharge than patients in states with the longest LOS.
- Eleven states had a median LOS of two weeks or less. In those states, 1 in 10 patients (10.8%) was rehospitalized within 30 days of discharge, and slightly more than two in 10 patients (22%) were readmitted within 180 days.
- Nine states had a median LOS of four months or more. In those states, 2.8% (fewer than three in 100) patients were readmitted within 30 days of discharge, and 7.9% (fewer than eight in 100) were readmitted within 180 days.

Figure 1 illustrates the pattern. Each point on the graph represents an individual state's readmission rate at 30 and 180 days as a correlate of the median LOS in its state hospital system.

Figure 1. 2015 state hospital length of stay and readmission rates by state



Because state hospitals are the facilities of last resort and serve only individuals with the most severe and dangerous symptoms, the association between LOS and rehospitalization may not be replicated in community and private hospitals, where patients typically have milder symptoms and may self-admit. However, precisely because state hospitals are legally obligated to serve their patients at public expense and treat the patients who are most severely compromised by serious mental illness, the association of LOS and readmission is a matter in which both patients and the general public have a considerable stake.

Ultimately, reducing length of hospital stay is a tactic for reducing the cost of serious mental illness by providing inpatient treatment to more people without providing more beds. With no apparent end in sight to the elimination of psychiatric beds and no clear guidance on safe minimum bed numbers, a clearer understanding of the clinical and economic impacts of this trend is needed to inform public policy and practice. Patients who are readmitted to state hospitals do so only after they have relapsed and deteriorated sufficiently to meet civil commitment standards. Often, they recycle through emergency rooms and the criminal justice and other public systems on the way back to the hospital, to their personal detriment and at enormous public cost.

RECOMMENDATIONS

The magnitude and impact of these public health issues demand the following actions:

1. Federal funding of research to assess the role of reduced length of stay in rehospitalization risk for psychiatric patients treated in public and private psychiatric facilities
2. Federal funding of a comprehensive analysis of the public service costs incurred by short-stay psychiatric patients who are rapidly rehospitalized, including emergency medical, criminal justice and homelessness costs that occur in the course of their relapses
3. Federal funding of an evidence-based assessment of psychiatric bed need in the United States by bed type, facility and location to provide guidance for supplying a safe minimum number of beds to meet need
4. Incentivizing the development of new psychiatric hospital beds through measures such as full repeal of the exclusion of institutions for mental diseases ("IMD Exclusion") from Medicaid reimbursement.

Rapid rehospitalization is the outcome of many factors. Given its impact on mental health recovery and its high public health cost, identifying contributors that might be mitigated to reduce the rate of readmission is humane, prudent and urgently needed. Length of stay is a leading candidate for such consideration.

BACKGROUND

Hospitalization is expensive, and psychiatric hospitalization is very expensive — the single greatest direct cost of serious mental illness and the source of more US hospital days than any other medical condition.[26] The federal government's "national bill" for mood disorders and schizophrenia in 2013 (the most recent year reported) was $28 billion. Schizophrenia hospitalization alone cost $11.5 billion, of which $646 million resulted from readmission within 30 days of discharge.[27,28] Combined, mood disorders and schizophrenia cost Medicaid more than twice what respiratory failure or heart attack did.[29] They are also the diseases most likely to be treated in state hospitals.

In this context, it may not have been inevitable — but certainly is not surprising — that reducing psychiatric hospitalization is a long-standing target of state mental health departments, private service providers and the health insurance industry.

The most visible result of this effort has been the near extinction of state psychiatric hospitals and mental health beds within other hospitals. The 340 psychiatric beds per 100,000 people that were occupied at the peak of state hospitalization in 1955 are no longer necessary because medication breakthroughs at that time made it possible for more people with serious mental illness to live safely and successfully in their communities. However, with few pharmaceutical advances since then and the failure of the mental health system to replace state hospital beds with suitable facilities in communities, the present number of fewer than 12 beds per 100,000 people is widely considered to be grossly inadequate.[30]

"Length of stay is still an unsettled issue in psychiatric practice. The parameters for both lower and upper limits of hospital stay need to be determined, as well as the relationships of these parameters to specific patient groups."

L. Appleby et al.
Length of inpatient stay and recidivism among patients with schizophrenia.
Psychiatric Services (1996)

A significant but less visible result has been shortening psychiatric hospital stay duration. Reducing LOS reduces hospitalization cost per patient and increases the number of people who can be treated with the same number of beds. The metric has been shrinking for decades.[31,32] In 1993, Appleby and colleagues reported that median public hospital stay had fallen by almost half from 1970 to 1980 and dropped further to 28 days by 1986.[33,34] By 2013, LOS for schizophrenia and other psychotic diagnosis in the United States had fallen further still, to seven days — exactly one-quarter of the duration Appleby reported 20 years earlier.[35]

Beyond the numbers, the dwindling length of psychiatric hospital stays can be seen in the evolution of how researchers have described LOS over the years. A 1996 report on LOS and readmission around Chicago called 43 days a "long stay" and 22 days a "short stay."[36] By 2016, an Australian study called 12 days "prolonged," although it was barely more than half of what qualified as a "short stay" only 20 years earlier.[37] Stays of fewer than 10 days are now common; they are called "ultrashort" stays.[38]

To test the hypothesis that declining lengths of stay are associated with rising psychiatric hospital readmissions in state hospital systems, the authors analyzed state hospitalization data the federal government collects annually. The resulting report represents the largest and first known comparative analysis of the association in the states. The finding that states with shorter median psychiatric hospital stays have significantly higher hospital readmission rates than states with longer median stays supports the hypothesis.

METHODOLOGY

State hospital LOS for discharged adult patients and 30-day and 180-day readmission rates were collected from the Uniform Reporting System (URS) tables published by the Substance Abuse and Mental Health Services Administration (SAMHSA) on its Drug and Alcohol Services Information System (DASIS) website. The state-specific URS tables are a component of SAMHSA's Mental Health National Outcome Measures (NOMs) reporting system that operates to create "an accurate and current national picture of substance misuse and mental health services."[39] Data are developed and reported annually from state mental health department reports required as a condition of SAMHSA's Mental Health Block Grant program.

State hospital median LOS (in days) for all discharged clients from the fiscal year ending June 30, 2015, was taken from URS Table 6. The URS tables were released on a series of dates in the summer of 2016 and include hospitalization data for 137,956 state hospital patients nationwide. A "client" is defined by the reporting requirements as any person served by the state mental health authority, a definition that captures all patients served by state hospitals. Median, rather than mean (average), LOS was used to analyze the correlation because LOS is not normally distributed; the majority of patients are discharged after a short period of time, and a smaller number of patients stay for a long period of time.

Readmissions of civil patients to state hospitals within 30 days and 180 days of discharge from the same hospitals were taken from URS Table 20. Forensic patient readmission rates were excluded from the analysis because the hospitalization of individuals referred by the criminal justice system is confounded by court orders, the regulation of LOS by statute in some states and other factors.

Kansas, Maryland and Michigan did not report complete data to SAMHSA and were excluded from the analysis for this reason. Hawaii and Arizona were excluded because of unique characteristics in their data. Hawaii reported an LOS of 201 days, with 20% of patients readmitted within 30 days of discharge and 60% readmitted within 180 days.[40] However, virtually all of Hawaii's state hospital beds are occupied by forensic patients, leaving too few civil patients to produce accurate statistics.[41] Arizona reported a median LOS of 469 days, with 0% readmissions. The 0% rehospitalization rate is explained by the median LOS in excess of a year. The state's *average* length of stay (990 days or nearly three years) suggests that the few extremely long-stay patients are rendering the median statistic unrepresentative.

Spearman's rank correlation coefficient was used to assess statistical significance of the correlation between median LOS, 30-day and 180-day readmission rates and state hospital beds per capita. The resulting r coefficient was transformed into a Z score, and a p-value was determined. Statistical significance was reported at a 5% ($p < 0.05$) confidence level based on a two-tailed analysis.

FINDINGS

The average of state median LOS reported in the federal URS tables was 75 days, with an average readmission rate of 8.2% within 30 days and 18.5% within 180 days. This average is considerably higher than median LOS for all psychiatric patients in facilities reported elsewhere, likely because the population that state hospitals serve is limited by law to individuals with the most severe diagnoses and symptoms and includes many individuals who require extended stays to stabilize.

Analysis of the relevant URS data found statistically significant negative correlations between state hospital LOS and readmission rates at both 30 ($r = -0.49$, $p < 0.001$) and 180 days ($r = -0.47$, $p < 0.001$) (see Table 1). Among the findings:

- Eleven states reported median LOS of two weeks or less (in rank order from shortest LOS): Wisconsin, Alaska, Nevada, Tennessee, Kentucky, New Hampshire, Illinois, South Dakota, Ohio, Georgia and North Dakota
- Nine states reported LOS of six weeks or more (in rank order from longest): Oregon, California, Utah, Nebraska, Florida, Indiana, Missouri, Pennsylvania and Louisiana
- Fourteen states reported higher median LOS than average and 30-day readmission rates that were lower than average (in rank order from longest LOS): Louisiana, Pennsylvania, Missouri, Indiana, Florida, Nebraska, Utah, California, Oregon, Rhode Island, New Jersey, Alabama, New York and Connecticut
- Eleven of these states continued to report lower rehospitalization rates at 180 days (in rank order from longest LOS): Louisiana, Pennsylvania, Missouri, Indiana, Florida, Nebraska, Utah, California, Oregon, Rhode Island and Alabama
- Eleven states reported lower median LOS than average and 30-day readmission rates that were higher than average (in rank order from shortest LOS): Alaska, Tennessee, Kentucky, New Hampshire, Illinois, South Dakota, Ohio, Iowa, Minnesota, North Carolina and Massachusetts
- Ten states reported median LOS that was lower than average along with 180-day readmission rates that were higher than average (in rank order from shortest LOS): Alaska, Tennessee, Kentucky, New Hampshire, Illinois, South Dakota, Georgia, Texas, Minnesota and Wyoming.

Table 1. State hospital median length of stay and 30- and 180-day readmission rates

STATE	MEDIAN STATE HOSPITAL LENGTH OF STAY (DAYS)	STATE HOSPITAL READMISSIONS WITHIN 30 DAYS*	STATE HOSPITAL READMISSIONS WITHIN 180 DAYS*
Wisconsin	4	5.9	13.7
Alaska	5	15.5	30.5
Nevada	5	1.7	2.3
Tennessee	5	10.5	22.9
Kentucky	8	9.4	25.3
New Hampshire	8	10.5	22.8
Illinois	11	12.4	19.3
South Dakota	11	9.6	27.1
Ohio	12	9.1	18.0
Georgia	13	7.7	19.1
North Dakota	14	23.0	40.9
Texas	15	7.7	20.0
South Carolina	20	3.5	11.6
New Mexico	21	25.5	45.6

* as a percentage of all admissions
\+ excluded from correlation analysis
$p < 0.001$ at both 30 and 180 days

Table 1. State hospital median length of stay and 30- and 180-day readmission rates, continued

STATE	MEDIAN STATE HOSPITAL LENGTH OF STAY (DAYS)	STATE HOSPITAL READMISSIONS WITHIN 30 DAYS*	STATE HOSPITAL READMISSIONS WITHIN 180 DAYS*
West Virgina	22	20.1	33.7
Iowa	25	9.1	14.1
Virginia	25	6.2	12.6
Mississippi	26	2.0	10.6
Delaware	27	7.6	10.6
Idaho	36	3.1	14.3
Minnesota	36	14.4	26.6
North Carolina	36	9.7	16.8
Arkansas	45	8.1	16.3
Colorado	48	6.7	14.7
Montana	48	6.0	14.1
Massachusetts	52	8.7	11.1
District of Columbia	58	4.7	12.5
Oklahoma	61	3.5	12.0
Wyoming	62	2.9	28.3
Washington	67	2.6	10.4
Vermont	70	16.7	23.8
Connecticut	78	7.5	19.4
Maine	82	8.9	22.2
New York	85	7.9	18.7
Alabama	87	6.2	14.8
New Jersey	87	7.8	20.8
Rhode Island	100	2.0	2.0
Oregon	122	0.4	9.0
California	124	3.9	11.2
Utah	139	3.5	6.6
Nebraska	151	4.3	7.4
Florida	176	0.0	0.0
Hawaii+	201	20.0	60.0
Indiana	213	1.4	5.9
Missouri	231	6.3	14.7
Pennsylvania	232	2.8	7.1
Louisiana	248	2.6	8.8
Arizona+	469	0.0	0.0
Maryland+	x	3.1	9.3
Kansas+	x	10.5	26.5
Michigan+	x	x	x

* as a percentage of all admissions
\+ excluded from correlation analysis
$p < 0.001$ at both 30 and 180 days
x incomplete data

The relationship between psychiatric LOS and readmission rates is multifaceted, which means that LOS does not necessarily predict an individual state's rehospitalization rate. Factors such as state criteria regulating hospital access, the number of beds available to patients who are not criminal offenders, hospital discharge practices and the availability of community resources after discharge, among others, are likely to influence readmission. For example, Minnesota, North Carolina and Idaho all have median LOS of 36 days. However, Minnesota's readmission rate was 14.4% within 30 days and 26.6% at 180 days, while North Carolina's rate was significantly lower, at 9.7% and 16.8% at the same points post-discharge. Idaho's was lower yet: 3.1% and 14.3% at 30 days and 180 days, respectively.[42,43,44] Interestingly, in the Treatment Advocacy Center's 2014 grading of the quality of inpatient commitment laws, Minnesota, North Carolina and Idaho received grades of C-, A- and A+, respectively.[45]

The association between shorter LOS and rehospitalization is statistically significant in the system-wide analysis. Variation between individual states and identification of patterns within subsets of the patient population (e.g., patients with schizophrenia, bipolar disorder, other affective disorders) were outside the scope of this analysis but merit further study.

LIMITATIONS

The findings of this analysis are based exclusively on LOS and rehospitalization data reported by the states and Washington, DC, to SAMHSA's NOMs reporting system for fiscal year 2015. The consistency and completeness of the underlying state data were not verifiable within the scope of this study, which may reduce the comparability of data in some cases. Five states were eliminated from the study: Michigan, Kansas and Maryland because of failure to submit complete data; Hawaii and Arizona because of the data distortions resulting from circumstances unique to them. Additionally, because NOMs collects only state hospital data, and comparable data are not publicly available for community and private hospitals nationwide, the analysis does not include the entire universe of US psychiatric hospitalizations and may not be representative of it.

A further limitation of the study is the methodology used by NOMs and nearly all the academic literature to define hospital readmission. Typically, rehospitalization statistics are developed as a measure of readmission to the same hospital that has discharged the patient or, at most, to the same hospital system where the patient was hospitalized. Thus, for example, the rehospitalization of a patient discharged by a state hospital and subsequently admitted to a different psychiatric facility or to a state hospital in another state is not reflected in the data. As a result, the findings likely understate the rate at which psychiatric patients return to inpatient care within a 30- or 180-day period by a factor that cannot be determined from public data.[46]

Beyond these limitations to data analysis, the scarcity and quality of much of the literature examining LOS and hospital readmission deprives the topic of a solid evidence base within which to consider the findings of this analysis.

DISCUSSION

The question of whether shortening psychiatric stay increases the likelihood of readmission has been debated for decades and remains contentious, as are most topics related to psychiatric beds. Study of the topic is widely characterized by inconsistent definitions and parameters; data that are decades old and/or incomplete, poor in quality, difficult to interpret or otherwise of little usefulness[47]; selection bias[48]; and other flaws.

"Managed care has reduced the mean length of stay for psychiatric hospitalizations, which has resulted in decreased costs and has raised concerns about the quality of care."

R. Figueroa et al.
Use of claims data to examine the impact of length of inpatient psychiatric stay on readmission rate.
Psychiatric Services (2004)

Findings and conclusions in the resulting body of literature tend to be incomparable and/or contradictory.[49] Zhang, Harvey and Andrew looked at an acute inpatient clinic in Australia to conclude that "risk of readmission is not associated with LOS."[50] Auffarth and colleagues studied comparable private and university hospitals in the United States and Germany to conclude, "Short inpatient stays lead to a higher risk of re-admission and other negative effects, like extended number of suicides and subjective feeling of not having time to recover."[51] Lee, Rothbard and Noll analyzed more than 45,000 psychiatric discharges from 106 community hospitals in Pennsylvania in 2006 to arrive at "an unexpected finding that hospitals with longer stays had higher rates of readmission."[52] However, patterns in state hospitals — with their vastly more compromised patient population — are not reported in any of them.

A final conclusion that "there is a need for further discussion"[53] may be the most common denominator in the relatively slight body of literature on the correlation of these two variables.

Any study of shrinking psychiatric hospital stays and their human and economic costs is additionally handicapped by the absence of research into the clinical processes and outcomes from hospitalization in general and consensus regarding optimal length of hospital stay in particular.[54,55,56] Allison and colleagues in 2016 cite evidence that an "adequate trial" of medication to stabilize psychotic symptoms is at least six weeks but note that in Australia — as in the United States — typical acute stays are not nearly that long.[57] Figueroa, Haman and Engberg in a 2004 study flatly declare, "There are no commonly accepted length-of-stay guidelines for inpatient care of psychiatric conditions,"[58] although health care insurers produce them for virtually every other medical condition. Zhang, Harvey and Andrew in 2016 consider the literature on LOS and rehospitalization and report that "available studies were poorly designed, outdated or only looking into variables that are unlikely to be changed…."[59] Also in 2016, Lamb and Weinberger bemoan the scant attention paid to the roles of protection, safety, security, social support and removal from stress that state hospitals once supplied and that may affect the outcomes of patients they serve.[60]

What *is* well established is that the ever-shrinking psychiatric hospital stay is fundamentally driven by economics.[61,62,63,64,65] In the United States, where the bed shortage is dire by international standards,[66] states without enough beds create capacity to handle more patients by discharging the patients they serve faster.[67] Insurance companies use a combination of "gatekeeping and utilization review" to motivate hospitals to shorten hospital stay, and "under some managed care plans, a case-based reimbursement mechanism has generated *incentives* for hospitals to shorten stays" (our emphasis).[68] As long ago as 2004, it was reported that "the hope (of managed behavioral health organizations) is that hospital-specific measures of performance can be used to evaluate facilities at the time of credentialing or

contracting with the goal of influencing hospitals with very brief or long stays."[69] The response of state hospitals faced with reduced budget from their legislatures and private hospitals faced with penalties and incentives from insurers has been to reduce psychiatric stays.

Inherently, the immediate cost of a shorter hospital stay is less than that of a longer stay. However, defining "cost" as the immediate savings of discharging patients sooner without consideration of the administrative and clinical costs associated with readmission and the secondary costs that may result from their rapid readmission produces an artificial and incomplete construct. A comprehensive analysis of the cost of short and ultrashort psychiatric hospitalization would also consider the role and costs of short psychiatric hospitalization in hospital emergency room usage, where unstable or decompensating patients are first seen; in law enforcement and jails, where behaviors associated with untreated mental illness lead to criminal justice involvement; and in other negative outcomes, including homelessness, victimization, suicide and acts of violence.

Given the stakes for patients, communities and taxpayers, such an analysis is overdue. What cannot be overlooked in parsing the numbers, however, is the role of psychiatric bed supplies in the equation. Ultimately, reducing length of hospital stay is a tactic for providing inpatient treatment to more people without providing more beds. Reducing rehospitalization rates might reduce bed demand, but increasing hospital stays would reduce bed capacity.

As long as bed shortages persist, the options for addressing these issues or any whose resolution depends on an adequate supply of psychiatric beds will remain limited and the benefits of such reforms beyond reach.

RECOMMENDATIONS

Given the magnitude and impact of public health issues associated with psychiatric relapse and rehospitalization, Congress must:

1. **Fund research to assess the role of reduced length of stay in rehospitalization risk for psychiatric patients treated in public and private psychiatric facilities.**
   Academic studies of whether short psychiatric hospital stays increase rehospitalization risk generally have been limited in scope and/or of poor quality. Unsurprisingly, their conclusions have been contradictory. The analysis reported in this study is unique in comparing the experiences of a large population consisting of state hospital patients. It found a sufficiently significant association between the two factors to warrant analysis at the national level to address the question of whether diminishing psychiatric hospital stays are increasing hospital readmission rates, a matter of patient and public welfare and taxpayer cost.

2. **Fund a comprehensive analysis of the public service costs incurred by short-stay psychiatric patients who are rapidly rehospitalized, including emergency medical, criminal justice and homelessness costs that occur in the course of their relapses.**
   Short psychiatric hospital stays are a cost-containment mechanism. However, cost analyses that capture only immediate, direct costs (e.g., the cost of a 3-day hospital stay versus a 10-day stay) are incomplete and thus inadequate to determine the actual cost impact of short hospital stays. If it is found that shorter LOS is associated with higher rates of relapse and rehospitalization, the costs that result from those events must be recognized in cost assessments and considered in policies and practices producing short hospital stays.

3. **Fund an evidence-based assessment of psychiatric bed need in the United States by bed type, facility and location to provide guidance for supplying a safe minimum number of beds to meet need.**

   Short psychiatric hospital stays are an adaptation and reflection of the nation's dire psychiatric bed shortage. Despite widespread consensus that "more beds are needed," neither the United States nor its individual states have conducted research to provide guidance on safe minimum bed numbers needed to meet demand. Given the continued closure of psychiatric beds nationwide and the significant individual and societal consequences resulting from it, comprehensive assessment of bed need by bed and facility type and region to guide states in maintaining safe minimum numbers is imperative.

4. **Incentivize the development of new psychiatric hospital beds through measures such as full repeal of the exclusion of institutions for mental diseases ("IMD Exclusion") from Medicaid reimbursement**.

   Psychiatric bed access — in which length of stay is one factor — is exceptionally sensitive to economic incentives. Since the mid-1900s, incentives have overwhelmingly been directed at reducing the number of mental health beds in America. Mitigating the widespread psychiatric bed shortages that have resulted from these policies requires reevaluating those incentives that erect barriers to creating sufficient beds to meet need.

ENDNOTES

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The Treatment Advocacy Center is a national nonprofit organization dedicated exclusively to eliminating barriers to the timely and effective treatment of severe mental illness. The organization promotes laws, policies and practices for the delivery of psychiatric care and supports the development of innovative treatments for and research into the causes of severe and persistent psychiatric illnesses, such as schizophrenia and bipolar disorder.