The Psychiatric Bed Crisis in the US:

Understanding the Problem and Moving Toward Solutions

Section 5

Community System Contributors and Variables Impacting Hospital Bed Use



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A. Introduction

What services and resources in a community system might reduce the need for functional psychiatric beds? What system elements and variables might increase need? This section focuses on data-supported interventions proximal to the entry and exit points of hospital-level care, as well as an array of variables that can impact the number of hospital-level placements needed in a given community.

In a 2016 position statement, the American Psychiatric Association called for a series of features to be part of a comprehensive system to support individuals with serious mental illness (APA, 2016). Many of these features apply to effective community mental health systems in general. Drawing from and expanding on that statement, we propose that services shall be:

- Accessible (including access to telehealth technology).
- Evidence-based (when an evidence base has been established).
- Delivered in the least restrictive setting possible.
- Appropriate to functional status.
- Integrated to address co-occurring conditions and complex human service needs of the person served.
- Adequately funded and resourced.
- Person-centered, strength-based, recovery-oriented, trauma-informed.
- Culturally and linguistically sensitive, taking into consideration social, cultural, ethnic, racial, language spoken, gender identity and expression, sexual orientation, sensory disabilities, and economic factors (through an intersectional approach, with care delivered in a way that is culturally relevant).
- Accountable for coordinating and supporting transitions across levels and sites of care.
- Systematically evaluated through a High-Value Care Performance lens, where dimensions of efficacy, effectiveness, mortality, safety, cost, and experience (patient, family, employee and other key stakeholders) are defined uniformly and quantified and measured over time and across systems.

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Ideally, a comprehensive community system would provide an appropriate array of services to meet all levels of intensity and complexity of need. Hospitalizations within such a community system would be appropriately utilized and readily available for those individuals who need that level of intensive supervision and intervention, with 24-hour medical/nursing management. All hospital beds would be utilized for their intended purpose, and discharge disposition options—be they intensive outpatient referral, residential crisis services, transition placements, rehabilitative programs, or shelter placements—would be comprehensive and tightly interconnected to community services. Reimbursement rates would be proportionate to levels of service, including hospitalization and diversion beds (placements that are appropriate alternatives to hospital-level care). Payor guidelines would consistently facilitate matching an individual's care needs with medically necessary and most appropriate resources. Compensation for physicians providing the service would be equivalent to those providing medical/surgical services, and financial incentives ensuring that the right patient is treated at the right time, in the right place, would be built in the model. Critical exploration on this topic was completed in 2005 by the Acute Care Work Group, whose recommendations included that acute care fully involve patients and families, promote assessments of community readiness, increase communitybased alternatives to inpatient and residential acute care, train the acute care workforce, reduce fragmentation, and modify financing to fund the full continuum of acute care services (Acute Care Work Group, 2005).

In reality, a wide range of variables impacts hospital bed utilization.

In reality, a wide range of variables impacts hospital bed utilization. An individual's wellness can be shaped by psychiatric diagnosis, burden of illness, treatment and response trajectories, and psychosocial and legal factors across jurisdictions. Complex determinants of mental health and functioning may include co-occurring substance use and/or intellectual/developmental challenges, psychosocial factors, educational factors, vocational factors, financial factors, and general medical comorbidities. (For a discussion of population variables, see Section 4 Population Variables.)

Further, no two communities have identical resources or systems. For a given community, it is important to know not only whether certain service elements exist and are accessible, but whether they are of sufficient *scale* (capacity, reach, accessibility) to meet the community's needs. Reimbursement variables impact not only hospital-level services but the entire continuum of care. (See Section 3 Financing of Psychiatric Beds.)

Acknowledging that there are innumerable population and system variables that can affect hospital level of care in a given community, this section focuses on specific system variables and influences that can affect the need to use hospital-level care. Variables are organized, below by the generalized expected impact on bed utilization for purposes of modeling: "likely to decrease/increase" functional bed utilization or "variable impact" on utilization. The authors acknowledge that the services and variables identified would, in reality, impart nuanced and potentially bidirectional impact at any given point in a system; implications for bed utilization are generalizations offered for purposes of modeling.



The section authors recognize the limitations inherent in looking at a cross-sectional, versus a longitudinal, view of a community system and factors that impact it. They also recognize that there will be individuals and populations not yet identified (or "visible") to a given system, who will require services of that system.

Rather than limiting the below descriptions to what services may be associated with the designations *serious mental illness* (SMI) or *serious and persistent mental illness* (SPMI), this section adopts a broader approach, considering functional needs of any individual, with any level of service need, at a given point in time. The below outline represents a collection of services which in most communities are administered by diverse provider types (with equally diverse funding sources), and that a single unified system overseeing all such services would, to many, represent the true "ideal." While such discussion is critical, it falls outside the scope of this section.

It is not the intention of this section to suggest that bed utilization is inherently desirable or undesirable. Rather, the authors seek to elucidate a range of potentially *high-impact* or *high leverage* factors worth consideration in estimating bed need, including for purposes of modeling.

B. Services and Variables Influencing Utilization Hospital-Level Care

A comprehensive crisis system responds early, has a full range of diversion services (resources serving as appropriate alternatives to hospital-level care for an individual at a given point in time) and continuing care through a crisis, offers ongoing support and transition from higher levels of care, and recognizes that a crisis typically extends for a period of time, and is not a one-time event.

1. Likely to Decrease Functional Bed Utilization

a) Full Continuum of Crisis Services

A portion of the general population will experience a mental health crisis which may be a single or circumscribed lifetime event. Rapid access to a responsive and comprehensive crisis services system can play a crucial role in determining whether a hospital-level of care will be required. A well-developed crisis system with a call center, mobile crisis service, walk-in center, crisis center, and crisis beds can divert many individuals to appropriate hospital alternatives (NASMHPD, 2017). Comprehensive self-assessment tools and tool kits are publicly available and include, among others: the Crisis Now Scoring Tool (NASMHPD, 2021), the National Councils' Roadmap to the Ideal Crisis System (National Council for Mental Wellbeing, 2021), and SAMHSA's National Guidelines for Behavioral Health Crisis Care Best Practice Toolkit (SAMHSA, 2020).

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Call Center and Helpline. Effective call centers can function to address the reason for the call which could include crisis resolution, provision of information, as well as triage to other available urgent care and er-term care services. Information from the National Suicide Prevention Lifeline (NSPL) finds that many individuals rate the interaction with NSPL call alone as effective in having averted actual suicide. Data from a community system in Arizona demonstrated that as many as 80% of calls result in crisis resolution without need for further higher level of care or intervention (Balfour, 2020).

Beginning in July 2022 a new dialing code, 988, will be available nationwide to access a helpline with trained counselors to respond to suicide and mental health related distress. It will operate through the existing NSPL's (1-800-273-8255) network of more than 200 locally operated and funded crisis centers across the country. The transition to 988 is an important step in strengthening crisis care throughout the U.S. (SAMHSA, 2022).

Mobile Crisis Teams. Many communities are developing mobile behavioral health crisis response teams that include behavioral health professionals that are equipped to deescalate and address crises in community settings. These may be part of a clinic-based setting and may also be part of a community first responder cadre that is deployed from a community 911 dispatcher either with or in lieu of emergency medical service or law enforcement.

Crisis Hub or Crisis Center. These are centers staffed with behavioral health professionals that are designed to assess and manage all individuals that arrive. These may be walk in individuals and often also include law enforcement drop offs for individuals who might otherwise have been detained and arrested. The rate of need for inpatient admission varies but these can play an important role in reducing demand for inpatient beds by resolving the crisis at hand and providing effective aftercare. "Living room" type crisis centers are distinct in that they typically accept self-referred individuals in distress.

Different intensities of facility-based crisis services are associated with different outcomes — for example, "living room" type crisis centers that accept low-acuity voluntary patients versus secure inpatient units that accept high-acuity patients.

Medical Triage and Screening. This is an important issue that is too often a rate limiting step if it mandates a screening and assessment through an emergency room physician and has been resolved differently with the myriad of models for staffing of call centers, mobile teams and crisis centers. For the purposes of this report, it is highlighted because some crisis systems require a general screen for acute medical problems before acceptance, whereas others accept all individuals and are adequately staffed to screen for, diagnose and manage basic medical problems that would be presenting along with the behavioral crisis.



Psychiatric Services in Emergency Care Delivery. Ideally, there would be no wait time in an emergency department setting prior to transition to hospital level of care once necessary next level of care has been determined. Emergency services may be delivered outside of emergency departments. Active treatment is initiated early in engagement, as in the EmPATH (Zeller, 2017) and Alameda models (Virginia Division of Legislative Services, n.d.).

- Psychiatric evaluation (including via telehealth when on-site psychiatry is unavailable), including recommending the most appropriate level of care and acute treatment pending disposition.
- Psychopharmacology: initiation, monitoring, adjustment of medication if indicated, and treatment of acute agitation.
- Detoxification under medical monitoring and buprenorphine induction.
- Peer support services.
- Social services.
- Care coordination, including "warm" hand-offs.
- Staffing, training, and facilities to care for high behavioral acuity.

Crisis Residential Services. These are settings that typically provide 1–2-week length of stay for individuals in crisis. Typically, there is some access to psychiatrist and nursing staff, but these are not designed to provide medical monitoring that is on par with hospital level of care. Examples include "adult treatment units" or "subacute facilities" which may provide diversion or step down from inpatient level of care and may accept individuals as a step down from inpatient care.

Intensive Community-Based Crisis Intervention and Critical Time Intervention (North Carolina Dept. Health and Human Services, 2019). There are services (including service provided by specialized teams) that can meet the needs of those requiring "routine" crisis services, and those who frequently utilize crisis services and either, do not engage readily with or benefit from routine services (including those with a history of frequent hospitalizations without improvement). Intensive community-based crisis intervention is a component of the ideal crisis continuum that is described in detail in the National Councils' Roadmap to the Ideal Crisis System report (National Council for Mental Wellbeing, 2021). It consists of intensive team-based 30- to 90-day "bridge services" that may be home or office based, and which help individuals and families who have experienced a crisis episode (which may include anything from a single mobile crisis visit to a hospital stay) to receive appropriate levels of intensive and flexible support and treatment until they are able to be successfully connected to "routine services." These services are generally designed to function for people in crisis as they present in the system. One subtype of this service is an intensive team designed for a specific cohort of high-risk individuals who are frequent service users. The cohort is followed over time to reduce their frequency of crisis presentations. Within any of these service types, critical time intervention is an evidence-based practice that can be successfully applied to organize service delivery.



Post-Crisis Follow-up. This can include availability of routine access to post-crisis follow up services, including phone calls for caring contacts, home visits, intensive crisis intervention team outreach, and provision of transportation to facilitate service access.

b) Comprehensive Ongoing Community-Based Services

Community mental health centers and community-based providers play an essential role in mitigating the need for inpatient psychiatric treatment. Accessible, high quality outpatient treatment that has some capacity to help each patient identify their risk for crisis (triggers), develop a person-centered crisis management plan as a part of routine treatment planning, and work with individuals to step up the intensity of service when persons are at risk of crisis can be very effective. There are populations of individuals with a higher intensity of need for psychiatric services who may be at chronic high risk of hospitalization unless provided comprehensive continuing care services on an ongoing basis (Crisis Now/NASMHPD, n.d.; SAMHSA, 2020). There are several services that can be effective in assisting a person in the management of illnesses and crisis management before they become a full crisis.

Outpatient Psychiatric Services. Outpatient services, including pharmacologic evaluation, monitoring and support can help individuals manage illness and address risk for crisis early so that admission is avoided. This requires the capacity to increase intensity of visits and adjust medication to avert decompensation. Best practices for psychopharmacology that maintain illness stability include access to clozapine therapy and the use of long-acting injectable medications for some illnesses. The Certified Community Behavioral Health Clinic model is currently supported as a demonstration by CMS and as an expansion grant series by SAMHSA and this model includes required outpatient access standards and crisis services.

Partial Hospitalization and Intensive Outpatient Programs. These programs can serve as step up to routine outpatient and also as step down from psychiatric hospitalization. They often allow for a much longer length of stay (several weeks) compared to inpatient length of stay which is too often less than a week. They typically are comprehensive and provide psychiatric diagnosis and treatment monitoring including for psychopharmacologic treatment and provide intensive group based and individual interventions. Transportation is often a barrier to regular participation and smaller communities may not have sufficient demand to render these programs as financially sustainable.

Team Based Care Models. There are several models of team-based care that are generally designed for a specific and defined population of high needs and have been demonstrated to be very effective in addressing treatment needs in community settings and in voiding hospitalization. Two examples of these team-based models are Assertive Community treatment and Coordinated Specialty Care.

Assertive Community Treatment (ACT). This wrap around team-based care model is typically utilized for individuals with known serious mental illness and who have had multiple hospitalizations. They work with individuals intensely, often multiple times a day, and include a nurse and psychiatrist so that the full range of treatment can be provided and supported. Outcomes



data shows that ACT services lead to a reduction in crisis presentations and admissions, particularly for individuals identified as high utilizers of crisis services without the ability to engage in conventional outpatient treatments (Georgia Dept., 2015). ACT is widely known to reduce hospitalization, homelessness, arrest and to improve functioning.

Coordinated Specialty Care (CSC). CSC is a type of team-based care that is designed to address the needs of transitional-age youth who are experiencing the onset of psychosis. Like ACT, CSC is a multidisciplinary team that is designed to work with the individual and can increase or reduce intensity of contact depending on the needs of the person at a point in time. (National Council for Mental Wellbeing, n.d.).

Assisted Outpatient Treatment (AOT) and Mental Health Court. AOT is outpatient civil commitment and can serve as step up to increase engagement with treatment or as step down to facility discharge from inpatient care. Most states have AOT as a component of civil commitment statues, however the actual utilization of AOT varies considerably. For individuals who are recurrently admitted and are unable to engage effectively with effective treatment, AOT can promote more sustained symptom remission, thereby reducing the likelihood of a need for hospital level of care (APA, 2019). AOT is a civil legal process and does not require a criminal charge. Mental Health Courts on the other hand, provide similar supervision for engagement with treatment but are triggered by an arrest and arraignment in a criminal court and their availability as an alternative to regular criminal court varies considerably.

Case Management and Care Coordination. These services are centered on care coordination and recovery support in the community. They are often involved in helping individuals address practical community living and support care coordination and follow up. In New York, for example, the Office of Mental Health developed a web-based platform for sharing data that supports care coordination (New York State, n.d.).

Homeless Outreach Services. Homeless outreach, coupled with access to scattered-site and congregate housing, may reduce hospitalizations for "street homeless" individuals with serious illness and substance use disorders. Lack of available housing may contribute to bed utilization, both by increasing initial admission rates and extending length of stay due to inadequate disposition options. (Center for Urban Community Services, n.d.; Coalition for the Homeless, 2021).

Peer Support Services (SAMHSA, n.d.). Peer support services include recovery support for individuals with mental illness or substance use disorders or dual diagnosis finding placement in rehabilitation programs in the community that provide housing, substance use disorder treatment and mental health care. Peer support services can be provided as a component of outpatient treatment or by peer run organizations.

Psychosocial Rehabilitation and Clubhouses. There are several models often provided in communities that provide general rehabilitation services and companionship and support recovery



by providing a sense of purpose and belonging. While they are not directly related to crisis management these types of services play a role in crisis prevention and early identification and intervention (Clubhouse International, n.d.).

Community Based Recovery Support Services. Two critical categories that support recovery and community stability include supported employment (SAMHSA, 2020) and access to supported housing.

c) Facilitation of Transitions to the Community

Successful transitions across levels and settings are vital to an effective system.

From Hospital Level of Care. Ideally, a hospital length of stay is sufficient to achieve stabilization and facilitate a smooth transition to the next level of care. A well-developed system reduces length of stay through access to stepdown beds and follow-up crisis care. Rapid follow-up (within 3 days) after discharge with suitable crisis intervention services reduces recidivism (McCullumsmith et al., 2015; AHRQ, 2015). Inappropriately foreshortened hospital stay raises the risk of recidivism.

From Correctional Facilities. Ideally, individuals transitioning back into the community following incarceration receive support sufficient to promote successful integration into community-based services. Detailed guidance has been published by the Bazelon Center for Mental Health Law (2009). Services may include assistance with housing, transportation, benefits, employment, outpatient services intake, and access to necessary pharmacotherapy resources. Case management services and peer support services within correctional settings can contribute to successful transitions. Rather than deactivate Medicaid, programs may suspend Medicaid, or allow individuals to enroll and be approved, pending release (Urban Justice Center, n.d.).

d) Specialized Services for Specific Sub-Populations

The capacity of a system to provide a continuum of services for populations with complex service needs is vital.

Access to Specialty Units. Some individuals require hospital-level care in a setting that provides specialty services, such as eating disorders treatment, medical-psychiatry services, intellectual disability services, sensory impairment-sensitive services, substance use disorder services, Dialectical Behavioral Therapy (DBT) programs, traumatic brain injury (TBI) and neurocognitive disorder-related services. Such capacity diverts and facilitates emergency department back-up and inappropriate utilization of general functional beds. Such availability impacts a system bidirectionally (both entry into and exit from hospital-level care). Having professionals with specialty expertise participate in care and transitions facilitates successful movement within a system.

Transition Placements. Individuals with complex care needs (e.g., with intellectual and developmental disabilities, individuals with TBI or neurocognitive disorders, individuals who require skilled nursing facility level of care) who cannot be discharged to available placement and await alternative placement may have a hospital stay extended. Caregivers may decline to have individuals



return to their care during a hospital admission. A crisis center can provide brief stabilization for 1-2 days then an individual can return to the home with in-home services. An individual in this instance can benefit from stabilization in the environment in which they will be living. A highly responsive system has processes to expedite disposition options for individuals in need of alternative placement, such as a skilled nursing facility or adult foster care. A responsive system "moves at the speed of the crisis."

e) State Hospital Facility Placements

The impact that closed state hospital beds has had on the availability of acute psychiatric beds varies from state to state. Currently, there is a wide variety in utilization of state hospital beds such that some beds are available for acute and long-term admissions while others are only available for longer term use, or for unusual needs that cannot be met in the community. The proportion of state beds used for court-mandated assessments and admissions has increased tremendously such that some state hospitals are virtually only court-ordered admissions.

f) Availability of Psychiatric Residential Placements

Individuals with sufficient resolution of acute symptoms during an acute inpatient stay may not yet be ready to transition to an outpatient level of care but are able to transition to psychiatric rehabilitative residential care. Individuals with comorbid substance use disorder and intellectual/developmental disability may be represented in this group. Lack of available residential placement may extend an otherwise acute hospital stay.

g) Availability of Intermediate Levels of Care

Individuals no longer requiring an acute level of hospital care, but who may need longer-term care (including for treatment-refractory conditions) may require intensive residential treatment placements outside a hospital setting (Plakun, 2018).

h) Appropriate Competency Restoration Placements

Many individuals who are not diverted from arrest are referred, by default, for competency restoration. This phenomenon can be a major driver of the expansion of waitlists for hospital placements. Ideally, competency restoration referral would be applied extremely rarely. Competency restoration is frequently requested by courts even when there is no substantial value in prosecution, but only for the purpose of directing an individual to mental health care. This mechanism is expensive and non-productive. As reported by SAMHSA's GAINS Center, "Hospital competency restoration is the most expensive form of restoration; due to cost pressures, there are not currently and likely never will be enough hospital beds to meet the demand. Further, even when, after a long wait, individuals are sent to a state hospital (rather than receiving treatment in jail or in the community), their ability to move forward following restoration is uncertain" (SAMHSA/Gains Center, n.d.). The availability of non-hospital alternatives in a community for such referrals is essential (Leifman and Coffey, 2020; OConnor, 2021).

i) Availability of Highly Supervised Non-Hospital Alternatives



A network of highly supervised residential settings may be utilized in combination to support individuals previously confined to long-term hospital placements. The state of Vermont implemented such a system after its state hospital was abruptly lost due to flooding (Nemethy, 2011).

j) Persistently Symptomatic and High-Risk

A small percentage of individuals outside of those with forensic service need a care setting with 24hour medical management and support appropriate to the level of psychiatric care need.

k) Forensic High-Risk

Highest-risk individuals who have committed severe offenses, have unremitting psychiatric illness, and are considered at risk for high-risk behavior if outside of a secure treatment setting require long-term hospital level of care.

2. Likely to Increase Functional Bed Utilization

a) Diversion from Law Enforcement, Arrest, or Incarceration

If a higher percentage of individuals in acute psychiatric crisis were diverted to the crisis system rather than arrested, the number of individuals coming into the whole crisis continuum would increase. Some of those diverted would require hospitalization. Data offers clues about the estimated volume of individuals who are diverted versus arrested by law enforcement related to presentations that are considered directly connected with a mental health crisis; diversion can occur post-booking but before arraignment, as well as pre-arrest, pre-booking (Leifman and Coffey, 2020; CSG, n.d.). Trauma-informed care is vital, considering that correctional settings house society's most traumatized individuals (Miller and Najavits, 2012).

b) Access to Involuntary Admission

In an agile system, most functional beds have the capacity to accommodate involuntary admissions. In many states, however, this is not the case, and therefore functional bed access is limited (Crisis Now/NASMHPD, n.d.). In states where emergency civil commitment has fewer barriers, more individuals will be presenting for hospitalization.

c) Identification of Individuals with Complex Conditions

In a comprehensive system, early identification of individuals who may have treatment-resistant conditions, but who are not currently in acute psychiatric crisis, may lead to hospital bed utilization to initiate complex treatment (e.g., electroconvulsive therapy, clozapine therapy) in a medically monitored environment. Population-based demographic trends—as a driver of increased demand—pertains here.

d) Treatment Refractory Conditions

Individuals with the onset of, or in the midst of an episode of, serious illness may show low treatment response to initial interventions during acute admission, and therefore require intermediate lengths of stay to allow for further evaluation, exploration of alternative interventions, and monitoring of response prior to transition to a less intensive level of care. Individuals with





comorbid cognitive disorders or those who are deemed to be Medically Frail may be represented in this group.

3. Variable Impact on Functional Bed Utilization

Emergency Evaluation and Hold Statutes. Emergency evaluation and hold statutes vary from one state to another. Such laws impact the rate of release from, and retention within, hospital settings.

C. Additional Considerations

There will be a disconnect between what hospital-level placements appear to be available in a system, and what placements are available in reality. For example, considerations such as milieu management in a hospital setting affect functional availability. The presence of double vs. single occupancy rooms, staffing considerations, and facility licensure affect access. "Patient mix" in a care setting exerts variable impact on functional bed utilization. Risk mitigation to ensure safety for all in the treatment environment also has an impact on bed capacity.

In some communities, additional types of resources may require consideration. For example, some communities are developing alternative supervised treatment settings for high utilizers of behavioral health and criminal justice acute services who require a supervised intermediate care setting—but not hospitalization—for that length of time (Medina, 2015). Some communities may have access to specialized services, such as Intensive Home Treatment, which may reduce the demand for functional hospital beds (Heath, n.d.).

Every system has unique nuances that incentivize how inpatient placements are utilized. Some states have institutions for mental disease (IMD) exclusion waivers that allow for increased capacity, while others do not (Treatment Advocacy Center, 2016; Eide and Gorman, 2021). Coordination between state agencies beyond the Department of Mental Health (or its equivalent), which varies widely from one jurisdiction to the next, can affect functional bed utilization by impacting numerous service intersections within a system.

There is much work to be done in considering and addressing structural/institutional racism within the field of psychiatry and within mental health systems of care, and how it affects access (NIMH, 2019).

Resources outlined above are far from equally, or equitably, available within and across communities.



Resources outlined above are far from equally, or equitably, available within and across communities. Further, barriers such as prescription medication pricing, lack of access to food and housing, and other socioeconomic factors are critical to consider in any community system and are not captured in this basic outline. Payor source heavily impacts resource availability. Insurance carried (or not carried) regularly determines whether an individual actually has access to the services needed.

Ideally, a model predicting capacity needs into the future would need to account for estimated changes in demographics over the period modeled—which may influence a gradual shift in the demand of services, year over year. (For example, demand for geriatric and home health care and autism specialty services for adults would be expected to increase.)

Notes on implications for bed need capacity modeling.

A better-functioning system is expected to reduce bed need overall. However, it will also result in improved identification of individuals for whom higher intensity services such as ACT and AOT are appropriate, potentially increasing service use for some in need. The bed need capacity model will need to account for such differences in need. Individuals receiving early interventions may demonstrate decreased functional bed utilization over time.

Consultants

The subgroup members thank the following consultants for volunteering their time and expertise to assist the subgroup in improving and expanding this section:

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