

‘Medical Clearance’ of Patients With Acute Mental Health Needs in the Emergency Department: A Literature Review and Practice Recommendations

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ABSTRACT

Introduction: Emergency departments have seen increasing numbers of patients presenting with acute mental illness. Currently, there is not a standard for assessing the medical stability of these patients prior to transfer to inpatient psychiatric services, which causes unnecessary delays in patient care.

Objective: Provide a literature review and multidisciplinary expert consensus recommendations to simplify and expedite the medical evaluation of patients requiring admission to inpatient psychiatric facilities.

Methods: A task force with representation from emergency physicians (Wisconsin Chapter of the American College of Emergency Physicians) and psychiatrists (Wisconsin Psychiatric Association) met to create this position statement. The members reviewed clinical practice guidelines and primary literature sources to develop evidence-based recommendations.

Results: Five categories of recommendations were developed: (1) A detailed history and physical exam should constitute the minimum necessary information required for most medical assessments. (2) Clinical information should guide further diagnostic testing; therefore, receiving facility blanket requirements for routine testing should be abandoned. (3) Emergency physicians should understand the limited medical capabilities of institutes of mental disease. Obtaining reasonable diagnostic testing that is not available at these facilities may be appropriate, though this should not delay patient transfer. (4) Structured medical evaluation algorithms should be used to enhance the uniformity of medical assessments for these patients. This task force recommends the Wisconsin SMART Form. (5) Emergency physicians and psychiatrists should communicate more regularly without intermediaries, both at the clinical encounter and beyond.

Conclusion: The recommendations in this paper are endorsed by the Wisconsin Chapter of the American College of Emergency Physicians and the Wisconsin Psychiatric Association, which strongly urge affected medical providers to adopt them into routine practice.

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INTRODUCTION

The purpose of this paper is to provide a literature review and practice recommendations regarding the care of emergency department (ED) patients with acute mental health needs. These recommendations carry the weight of a joint task force comprised of representatives from the Wisconsin Chapter of the American College of Emergency Physicians (WACEP) and the Wisconsin Psychiatric Association (WPA). The task force was convened to address multiple nonstandardized and suboptimal practices in the assessment of medical stability of these patients, a process previously termed “medical clearance.” Discussed below is background of the problem, what constitutes medical stability, and the special issue of boarding patients in the ED who are awaiting transfer to a psychiatric facility. The task force’s recommendations are aimed at streamlining the ED process in a way that is patient-centered, safe, and efficient. Though we refer to care provided by physicians, the task force believes that the recommendations apply to care rendered by other clinicians in the ED as well, particularly advanced practice providers.

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BACKGROUND

Visits to the ED for mental health complaints are increasing; they account for 6% of all adult ED visits and 7% of pediatric ED visits.^{1,2} When adult substance abuse-related visits are also included, this proportion increases to 12.5% of patients presenting to the ED for care annually.³ In fact, the rate of ED vis-

its involving mental health or substance use disorders increased substantially from 2006 to 2014 (44.1%), outpacing the overall ED visit growth trend of 14.8%; suicidal ideation had the highest increase (414.6%) over the 9-year period.⁴ While emergency physicians can be instrumental in facilitating the care of these patients, the increasing demand for mental health services has brought these resources to the brink of exhaustion, particularly inpatient psychiatric care. When not adequately operationalized, the health system becomes inefficient and patients' needs go unmet.

The incidence of mental illness nationally is rising while available services and funding are either decreasing or the rate of increase is not keeping pace with the demand.^{5,6} This is even more daunting because it has been accompanied by deinstitutionalization, lack of meaningful parity for mental health care, funding shortages, and continued stigma surrounding mental health. Consequently, there are more patients with mental illness finding themselves in crisis or needing services further upstream to pre-empt such emergencies.⁷

The gravity of the situation is highlighted by the 2016-2017 National Survey on Drug Use and Health, which reported that 822,000 respondents (18.54% of the population) in Wisconsin suffered from mental illness during that year, with 217,000 (4.88% of the population) suffering from severe mental illness.⁸ Despite this significant need, Wisconsin is noted to have a shortage of approximately 266 psychiatrists.⁹ The future of the profession is additionally complicated by the fact that half of all psychiatrists in Wisconsin are over 55 years old [unpublished data, Wisconsin Medical Society briefing, 2018]. Perhaps unsurprisingly, Mental Health America ranks Wisconsin 34th out of all states in mental health workforce availability, while the Bureau of Labor Statistics places Wisconsin 30th with regard to psychiatrist employment rates.^{10,11}

How Do We Assess Medical Stability?

Before transferring a patient to an inpatient psychiatric facility from an ED, the accepting inpatient team requires an assessment of medical stability. This is important because up to half of patients with mental health complaints have coexisting nonpsychiatric medical diseases that may cause or exacerbate their psychiatric condition.^{12,13} Moreover, nonpsychiatric medical illness, even when not affecting psychiatric symptoms, is highly prevalent and often undertreated in patients with underlying psychiatric disorders like schizophrenia, bipolar disorder, and schizoaffective disorder.¹⁴ Complicating this assessment is the fact that accepting psychiatric facilities are often freestanding, meaning they are not connected to a general hospital and, consequently, have limited ability to care for complex medical problems.

The goal of the ED-performed medical assessment is therefore twofold: (1) identify and stabilize any nonpsychiatric medical conditions that may be causing or contributing to the patient's current

symptoms (eg, encephalopathy/delirium, substance intoxication/withdrawal, infections, etc); and (2) identify and stabilize any acute nonpsychiatric medical illness (including exacerbations of chronic conditions like chronic obstructive pulmonary disease or diabetes) such that the patient may be safely managed at an inpatient psychiatric setting.^{15,16} This process is commonly referred to as "medical clearance," though we agree with the American Association of Emergency Psychiatry (AAEP) that this term is misleading. Instead, we will refer to this concept as "assessing medical stability" throughout the remainder of this manuscript. One key reason for this change in language is highlighted by Michael Weissberg in one of the first manuscripts discussing this issue: "The use of the term 'medically clear' in emergency room settings hinders patient care by impeding the flow of information between psychiatric and nonpsychiatric personnel."¹⁷

Key to the confusion in terminology and misunderstanding of its elements is the fact that it has no universally accepted definition. It may imply patient readiness for psychiatric evaluation, stability for transfer to inpatient psychiatry, or stability for discharge to outpatient care.¹⁸ Confusion is exacerbated by the fact that this assessment cannot reliably be standardized in terms of requiring specific tests. Instead, it needs to be tailored to the individual patient, beginning with a detailed history and physical exam. In so doing, the ED clinician should be able to ascertain what additional information (eg, laboratory tests, imaging tests, specialist consultation, etc) is required to ensure that the patient is medically stable for transfer and admission to an inpatient psychiatric setting, where other medical specialists may not be available.

If an acute, nonpsychiatric medical finding requiring immediate intervention is uncovered during this assessment, the patient should have such interventions performed prior to transfer. This may be aimed at treating a nonpsychiatric cause for the patient's acute presentation, but could alternatively be aimed at stabilizing an acute decompensation of a chronic medical condition. Once identified and stabilized, the diagnosis and resulting treatment should be communicated to the receiving psychiatric center. Importantly, medical stability does not mean that the patient is free from all medical problems or comorbid conditions, nor does it negate the possibility of the patient developing new signs or symptoms of an illness at the receiving facility. However, it is imperative that emergency physicians perform an appropriately thorough evaluation and document their findings to assist in the patient's ongoing care at the receiving psychiatric center. Common errors in the process of assessing medical stability include failure to obtain collateral information, failure to complete a thorough physical exam, anchoring on a primary psychiatric diagnosis, and inappropriate use of diagnostic testing.¹⁹ As a cautionary tale, 1 study found that 10 of 298 consecutive psychiatric admissions had a nonpsychiatric medical disease requiring treatment. Of those 10 patients, 8 were reported to

be “medically clear,” even though their disease could have been identified during a standard history and physical exam.²⁰

The Impact of ED Boarding

One of the key concerns with the current paradigm of assessing medical stability for patients with mental health crisis is its effect on ED boarding. Boarding is the time spent waiting in an ED for an inpatient hospital bed or transfer to another inpatient facility. It is an increasingly common phenomenon afflicting EDs nationwide,²¹ and has been associated with increased hospital length of stay (LOS) and mortality.²² The ED has a fixed capacity, and when the inflow (ie, patient arrivals) outpaces the outflow (ie, discharges and admissions), patients gather in the waiting area, delaying care for such individuals. Thus, for every mental health patient awaiting transfer to an inpatient facility, another patient’s needs may go unnoticed, potentially causing morbidity and mortality.

It should also be noted that patients with mental health complaints have a significantly greater ED LOS than patients with nonpsychiatric complaints. One study reported mental health-related visits had a mean LOS of 446 minutes versus 128 minutes for patients with other complaints.²³ Another study reported that patients with Medicaid or who are uninsured—a frequent occurrence for patients with mental health needs—had significantly longer LOS and were twice as likely to be in the ED for over 24 hours than privately insured patients.²⁴

METHODS

This task force was formed by WACEP and WPA in 2017. The mission at that time was broad: to combine complementary areas of expertise in order to synergistically solve mental health care concerns and advocate for positive health system changes as it relates to patients with acute mental illness. Initial meetings included a needs assessment, which yielded multiple inefficiencies in the mental health care continuum. One such area that received significant discussion was the process of assessing medical stability, so the task force focused its efforts on performing a literature review and developing recommendations—based on the available literature and expert consensus—to be used by both referring and receiving hospitals caring for patients with mental health emergencies.

Content experts from both emergency medicine and psychiatry (emergency psychiatry and inpatient psychiatry) were present during all discussions. Clinical practice guidelines from the American College of Emergency Physicians (ACEP) and the American Association of Emergency Psychiatry (AAEP) were reviewed.^{16,18,25} Further, task force members with additional training in research methods conducted a systematic review to identify those relevant papers regarding the process of assessing medical stability. This involved key word and medical subject heading searches in PubMed, screening articles by review of their abstracts, and inclusion of articles deemed relevant to this topic, though it was limited

to publications in English. Furthermore, the task force consulted key stakeholders involved in the process, including representatives of receiving psychiatric facilities, county mental health agencies, law enforcement professionals, and state and national psychiatric and emergency medicine organizations. The compilation of guidelines, references, and stakeholder discussions were then synthesized into a list of recommendations as described below in detail.

RECOMMENDATIONS

1. The emergency department evaluation of patients with acute mental health needs should include a detailed history and physical exam

While not all patients in acute mental health crisis require an assessment of medical stability in the ED, those who do present to the ED require a thorough history and physical exam, including a full set of vital signs.¹⁸ Though classic medical teaching suggests that mental health patients have difficulty reporting medical symptoms or history accurately, Amin and Wang found this to be incorrect, concluding that history and physical exam is sufficient to guide further diagnostic testing in patients with mental health complaints.²⁶ Ascertaining both past general medical and psychiatric history yields guidance for further diagnostic evaluation and risk assessment. Further, the physical exam should include core organ systems with an eye to assessing for evidence of infection, trauma, or other pathologic conditions, including toxidromes.¹⁹ It should, therefore, be done unclothed. If the patient refuses to disrobe for the exam, this limited physical exam must be communicated to the accepting physician in order to come to a consensus plan on what additional evaluation may be needed to ensure medical stability.

Historically, documentation of physical exam findings for patients with psychiatric presentations to the ED has been poor. In 1 study, only 50% of patients with schizophrenia who were evaluated in the ED had a full set of vitals, defined as blood pressure, heart rate, respiratory rate, and temperature.²⁷ A separate evaluation of 137 patients with acute psychiatric symptoms demonstrated that none had a mental status exam documented and fewer than 20% had a neurologic exam.²⁸ When evaluating which parts of the exam were missing in documentation, cranial nerve exam was documented the least frequently (11.4%), while an assessment of behavior was included most frequently (75.7%).²⁷ Emergency physicians have been shown to be less likely to document a complete history and physical exam when compared with nurse practitioners and family medicine physicians, though there is wide variability in documentation among all clinician types.²⁹ This is an important area to highlight, because when attempting to detect a nonpsychiatric medical problem for patients presenting to the ED for a psychiatric chief complaint, history and physical exam alone detects 94% of abnormalities.³⁰

As always, there are special patient populations for whom physicians should consider additional elements of the history and

physical exam. For example, among children, characteristics that should raise suspicion of nonpsychiatric medical disease include new-onset illness, onset before the age of 12 years, sudden onset of symptoms, visual or tactile hallucinations, seizures, and the absence of a family history of mental illness.³¹ Similarly, pregnant patients should give clinicians pause, as it can be the first time during which patients exhibit psychiatric illness or their baseline illness may be exacerbated by their pregnancy. Finally, psychiatric symptoms in the elderly are frequently due to nonpsychiatric medical disease. Identification of delirium or encephalopathy, for instance, can potentially change management, and an assessment of mental status should be part of the medical evaluation of these patients.^{13,32} In fact, frank disorientation among the elderly is more likely to be due to a medical cause than a primary psychiatric etiology. Previous reports suggest that emergency physicians miss the diagnosis of delirium in this cohort up to 76% of the time.^{33,34} Ideally, mental status examination should include an assessment of attention, executive function, orientation, and recent memory.¹⁶ Those who prefer a structured evaluation of mental status may refer to, among others, Kaufman and Zun, who found that a 6-item questionnaire worked well for identifying patients with severely impaired mental status.³⁵

2. Diagnostic testing should be guided by an individual patient's history, review of systems, and physical examination and is not always required for assessing medical stability

Of all the elements of the medical assessment process for patients with mental health needs, none seems to be as controversial and subject to practice variation as the requirement for routine diagnostic testing.^{36,37} On one side is the traditionally emergency medicine belief that testing should be geared toward findings that have a reasonable probability of existing for the patient and that would change management should an abnormality be identified. This conflicts with the concern of psychiatrists that all abnormalities should be identified in order to guide medical management at facilities that do not have comprehensive medical services. Requirements for routine testing are common, occurring for approximately 84% of psychiatric transfers,³⁶ and can be exhaustive, including sleep-deprived electroencephalogram (EEG).³⁸ In 1 report of patients admitted to a psychiatric facility in the United States during 2010 to 2014, 80% had at least 1 medical screening test performed.³⁹ The effects of having blanket requirements for diagnostic testing are significant: having any screening test performed increases ED LOS by 117 minutes (95% CI, 109.7-124.4).⁴⁰ Furthermore, overtesting corresponds directly with overtreatment, which can subject psychiatric patients to the side effects of a medical intervention without any of the benefits.⁴¹

A review of the literature, as referenced by policy statements from ACEP and AAEP,^{16,18,25} would suggest that routine testing is unhelpful to the management of patients presenting to the ED

Box. Recommendations

1. The emergency department evaluation of patients with acute mental health needs should include a detailed history and physical exam.
2. Diagnostic testing should be guided by an individual patient's history, review of systems, and physical examination and is not always required for assessing medical stability.
3. Emergency physicians should help facilitate the medical treatment of patients referred to freestanding psychiatric facilities, which have limited medical resources.
4. A uniform tool to guide the medical evaluation should be employed in all emergency departments in the state: The Wisconsin SMART Form.
5. Emergency physicians and psychiatrists should communicate directly about patient care.

with psychiatric complaints.⁴² Though the point of this article is not to report an exhaustive search of the evidence, a few key studies of routine laboratory testing warrant discussion. For instance, when routine laboratory tests were checked for all patients admitted to an academic psychiatry ward, only 1 case of 519 would have changed management, while there were numerous cases of positive urine drug screens, hyperglycemia, and anemia—all of which were managed on the psychiatry ward.⁴³ Further, a prospective, multicenter study found that while psychiatrists requested testing in 44% of patients, only 1 patient (0.5%) had an abnormal result that led to a change in disposition.⁴⁴ Another prospective study of routine laboratory testing among a cohort of 375 patients with psychiatric presentations found that only 1.1% of patients had an abnormality (all were abnormal urinalyses, which did not affect final disposition).²⁶ Finally, in a 5-year retrospective, multicenter study evaluating the utility of head computed tomography in patients presenting to the ED with “bizarre behavior” but no focal neurological deficits on exam or preexisting central nervous system disease, none had an acute finding.⁴⁵

Perhaps the most studied subset of routine laboratory testing for psychiatric patients is the urine drug screen. Opponents to the routine use of this test highlight that it is incorrect 24.8% of the time when compared with a gold standard of liquid chromatography/mass spectrometry testing.⁴⁶ This problem is exacerbated by the fact that its use in the ED is associated with increased ED LOS and charges, yet few have confirmatory testing done, suggesting that the results are used either erroneously or not at all.⁴⁷ One final note regarding urine testing is that urinalysis (to test for urinary infections) should not be performed in patients without urinary symptoms—even in the elderly—because asymptomatic pyuria and asymptomatic bacteriuria are common and are not indications for antibiotics.⁴⁸

Obtaining laboratory testing in pediatric patients with mental health needs, in particular, is both challenging to do and of little benefit. Among pediatric patients brought to the ED for involuntary mental health holds who have a nonconcerning clinical exam, 94.3% have clinically nonsignificant laboratory results.⁴⁹

Urine drug screens, in particular, have been shown to not affect management, even when positive.^{50,51} Another study of 871 pediatric patients with laboratory tests performed found that abnormal testing was associated with only 7 (0.8%) disposition changes and only 50 (5.7%) management changes that were not associated with a disposition change.⁴⁰ Regarding costs related to testing, a significant range has been reported: 1 study found that the median cost of routine blood and urine tests was \$1,235, while another found that the average charge for pediatric patients undergoing diagnostic testing was \$17,240 when accounting for secondary ambulance transfers and wages for sitters.^{49,52}

The purpose of discussing these largely negative studies is not to say that diagnostic testing of psychiatric patients has no role in their medical assessment. Rather, it highlights that adherence to a routine testing protocol may cause physicians to overlook instances when targeted testing is required. This is particularly true for higher risk populations, including the elderly, patients with no prior psychiatric history, and patients with preexisting medical disorders or current medical complaints.⁵³ Having no prior psychiatric history is especially concerning, with 1 study finding that 63% of patients with a new psychiatric complaint had a nonpsychiatric medical cause, most of which was toxicologic (cocaine and amphetamines).⁵⁴ Agitated patients requiring emergency intramuscular medications are another cohort that may require further investigation, since they are more likely to have abnormal laboratory findings than patients not requiring these medicines.⁵⁵ Korn et al suggested that routine comprehensive screening of all patients is prohibitive and unnecessary, instead recommending that routine laboratory evaluation be reserved for the elderly, homeless, and patients with new symptoms.⁵⁶ Diagnostic testing in these populations may include urinalysis, complete blood count, toxicology, basic metabolic profile, chest x-ray, electrocardiogram, and alcohol level.¹⁵ When available, elevated alcohol levels may be appropriately reassessed by breathalyzer.

3. Emergency physicians should help facilitate the medical treatment of patients referred to freestanding psychiatric facilities, which have limited medical resources

Freestanding psychiatric facilities, which are labeled Institutes of Mental Disease (IMDs) by the Centers for Medicare and Medicaid Services (CMS), have limited medical resources. This type of receiving facility varies greatly in staffing and ability to manage complex medical issues and often has separate requirements outside of standard medical stability assessment, known as exclusionary criteria. These can be categorized as reflecting limitations due to: (1) pre-existing or current medical conditions (particularly infections or end-stage diseases); (2) administrative burdens affecting staffing or requiring advanced equipment/training; and (3) abnormal laboratory results that psychiatric clinicians are not comfortable managing.⁵⁷

These variations in capacity to handle nonpsychiatric medical

illnesses continue to be a rate-limiting factor for global acceptance criteria to an inpatient psychiatric unit. For instance, while most may assume that inpatient psychiatric care is typically provided in general hospitals on a specialized unit, the majority of capacity in Wisconsin's state system, including the largest county (Milwaukee), are that of freestanding psychiatric hospitals. Due to being dissociated from general medical services, a commonly overlooked challenge when admitting to these facilities is severe alcohol and drug intoxication or withdrawal.³² Moreover, these facilities may have limited laboratory testing abilities, which may be the primary reason that such testing is requested prior to patient transfer. As such, requests for reasonable laboratory testing should be honored when possible, though this should not delay transfer of patients who are otherwise medically appropriate for transfer.¹⁶ To assist in understanding this limitation, facility-specific exclusionary criteria should be clearly defined in regional protocols and should not discriminate based on race, religion, language spoken, legal status, insurance status, or payer type.

4. A uniform tool to guide the medical evaluation should be employed in all emergency departments in the state: The Wisconsin SMART Form

Algorithms or protocols to assess the medical stability of psychiatric patients have been studied extensively. One such study of a field screening protocol, which was dependent on clinical findings alone, successfully triaged patients to regional psychiatric facilities resulting in only 0.3% of patients being diverted for medical stability assessment at a nonpsychiatric facility.⁵⁸ A similar evaluation of clinical screening by paramedics in over 1000 patients resulted in 27.4% of patients being transferred directly to a psychiatric facility without further medical screening. Though 10 returned to an ED within 6 hours, none were admitted for previously unknown conditions.⁵⁹

Based on these reports, it is logical that structured medical assessment of patients with primary psychiatric complaints in the ED is effective at identifying patients that do not need diagnostic testing. In 1 study of 500 consecutive patients for whom a structured assessment was employed, only 6 (1.2%) were sent back to the ED for reevaluation and none required more than an outpatient prescription.⁶⁰ The task force recommends the use of the Wisconsin SMART Form (see Figure), adapted from the SMART Form, which was created by the Sierra Sacramento Valley Medical Society.⁶¹ This form, and its underlying principles of medical assessment, is the result of a collaboration between psychiatrists and emergency physicians who aimed to develop a process for evaluating patients in mental health crisis in a way that is safe and timely, facilitating transfer to appropriate treatment centers in a resource-conscious way. If all 5 categories of the form are checked "no," the patient is considered medically stable without further diagnostic testing. The categories include: (1) new onset psychiatric condition; (2) medical conditions

Figure. Wisconsin SMART Form



WISCONSIN "SMART" FORM

| Criteria: | NO* | YES | RESOLVED (TIME) |
|---|-----|-----|--------------------|
| SUSPECT New Onset Psychiatric Condition? | S | | |
| Other MEDICAL Conditions that Require Screening? | M | | |
| -Diabetes (FSBG <60 or >250) | | | |
| -Possibility of pregnancy (age 12-50) | | | |
| -Other non-psychiatric medical complaints that require screening | | | |
| ABNORMAL? | A | | |
| -Vital Signs? | | | |
| -Temp: greater than 38°C (100.4°F) | | | |
| -HR: less than 50 or greater than 110 bpm. | | | |
| -BP: Systolic <100 or >180mm Hg. Diastolic >110mm Hg. (2 consecutive) | | | |
| -RR: less than 8 or greater than 22 rpm. | | | |
| -O ₂ Sat: less than 95% on room air. | | | |
| -Mental Status? | | | |
| -Cannot answer name, month/year, and location (minimum of A/O X 3) | | | |
| -If clinically intoxicated, HII score of 4 or more (see next page) | | | |
| -Physical Exam (un clothed)? | | | |
| RISKY Presentation? | R | | |
| -Age less than 12 or greater than 55 | | | |
| -Possibility of ingestion (screen all suicidal patients) | | | |
| -Presence of Eating Disorders | | | |
| -Potential for alcohol withdrawal (daily use equal to or greater than 2 weeks; past complicated withdrawal) | | | |
| -Ill appearing, significant injury, prolonged struggle, or "found down" | | | |
| -Trauma involved in presentation (head injuries, assaultive behavior, cutting, ligature, s/p MVAs or hanging) | | | |
| THERAPEUTIC Levels Needed? | T | | |
| -Phenytoin | | | |
| -Valproic Acid | | | |
| -Lithium | | | |
| -Digoxin | | | |
| -Warfarin (INR) | | | |
| -Other (Other anticonvulsants, Clozapine, TCAs, etc.) | | | |

**If all five SMART categories are checked "NO", then the patient is considered medically stabilized and no further testing is needed. If ANY category is checked "YES", then appropriate testing and/or communication between physicians needs to occur with appropriate documentation and time that the issue was resolved.*

Date: _____ **Time:** _____ **Completed by:** _____, MD/DO
Signature Printed

NOTE: If there is any lack of agreement between the Emergency Medicine Physician and the Psychiatrist on the above results, then an immediate phone conversation (between the two providers) is expected to occur to resolve the situation and come to a consensus plan.

An answer of "no" to each of the elements indicates that no further diagnostic testing is needed for the medical assessment of a patient with mental health crisis. A "yes" answer to a category indicates that further testing may be warranted. Regardless of whether testing is performed, any "yes" answer should be communicated to the receiving facility's physician along with appropriate documentation of the time and manner in which the issue was resolved.

that require screening; (3) abnormal vital signs, mental status, or physical exam (which should be done unclothed); (4) risky presentation; and (5) therapeutic drug levels needed. If the referring clinician answers “yes” to any of the items on the list, then appropriate testing and/or communication between physicians needs to occur with appropriate documentation and time that the issue was resolved.

5. Emergency physicians and psychiatrists should communicate directly about patient care

Though there were no specific studies evaluating the benefit of this recommendation, it is the consensus of the task force that, in the state of Wisconsin, very little communication occurs between physicians at referring and receiving hospitals in the care of mental health patients. Efforts to improve this should occur both at the time of the ED visit, as well as outside of the patient encounter. While in the ED, emergency physicians should feel empowered and encouraged to contact the receiving psychiatric facility and speak directly with the accepting psychiatrist about the care of the patient. Not only does this eliminate speaking with multiple intermediaries and the subsequent confusion that tends to occur when nonphysicians enter this dialogue, it also facilitates a collegial conversation aimed at understanding and tending to the patient’s needs.

Quality of care is improved when physicians communicate directly about assessment of medical stability, exclusionary criteria, and admission. As referenced above, communication also should take place outside of the clinical encounter. Ideally, this should occur at the department- or institution-level to develop sound clinical policies and protocols. However, individual multispecialty physician dialogues outside of clinical encounters also can be useful in terms of reestablishing trust between psychiatrists and emergency physicians. Suggested topics could include discussions of exclusionary criteria, capabilities regarding patients requiring seclusion, and what medical capabilities exist at accepting psychiatric facilities.

CONCLUSION

Caring for patients with mental health needs is a common occurrence in the ED. Though the health care system historically has suffered from a lack of uniformity as it pertains to the medical evaluation of these patients, this paper aims to correct that problem. The recommendations of this report seek to facilitate the safe and efficient care of patients requiring admission for psychiatric services.

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REFERENCES

1. Larkin GL, Claassen CA, Emond JA, Pelletier AJ, Camargo CA. Trends in U.S. emergency department visits for mental health conditions, 1992 to 2001. *Psychiatr Serv*. 2005;56(6):671-677. doi:10.1176/appi.ps.56.6.671
2. Simon AE, Schoendorf KC. Emergency department visits for mental health conditions among US children, 2001-2011. *Clin Pediatr*. 2014;53(14):1359-1366. doi:10.1177/0009922814541806
3. Owens PL, Mutter R, Stocks C. Mental health and substance abuse-related emergency department visits among adults, 2007: Statistical Brief 92. In: *Healthcare Cost and Utilization Project (HCUP) Statistical Briefs*. Rockville, MD: US Agency for Healthcare Research and Quality; 2006. <http://www.ncbi.nlm.nih.gov/books/NBK52659/>. Accessed October 25, 2018.
4. Trends in emergency department visits, 2006-2014. Healthcare Cost and Utilization Project (HCUP). <https://www.hcup-us.ahrq.gov/reports/statbriefs/sb227-Emergency-Department-Visit-Trends.jsp>. Statistical Brief 227. Published September 2017. Accessed October 26, 2018.
5. Curtin SC, Warner M, Hedegaard H. Increase in suicide in the United States, 1999-2014. *NCHS Data Brief*. 2016;(241):1-8.
6. McGinty E, Pescosolido B, Kennedy-Hendricks A, Barry CL. Communication strategies to counter stigma and improve mental illness and substance use disorder policy. *Psychiatr Serv*. 2018;69(2):136-146. doi:10.1176/appi.ps.201700076
7. Zeller SL. Treatment of psychiatric patients in emergency settings. *Prim Psychiatry*. June 1, 2010. <http://primarypsychiatry.com/treatment-of-psychiatric-patients-in-emergency-settings/>. Accessed August 21, 2019.
8. State data tables and reports from the 2016-2017 NSDUH. Substance Abuse and Mental Health Services Administration. <https://www.samhsa.gov/data/nsduh/state-reports-NSDUH-2017>. Accessed August 21, 2019.
9. Division of Care and Treatment Services, Wisconsin Department of Health Services. 2017 Wisconsin Mental Health and Substance Use Needs Assessment. <https://www.dhs.wisconsin.gov/publications/p00613-17.pdf>. Published July 2018. Accessed August 21, 2019.
10. Overall ranking. Mental Health America. <https://www.mentalhealthamerica.net/issues/ranking-states>. Published 2019. Accessed August 21, 2019.
11. Occupation employment and wages, May 2018. US Bureau of Labor Statistics. <https://www.bls.gov/oes/current/oes291066.htm>. Updated March 29, 2019. Accessed August 21, 2019.
12. Hall RC, Gardner ER, Stickney SK, LeCann AF, Popkin MK. Physical illness manifesting as psychiatric disease. II. Analysis of a state hospital inpatient population. *Arch Gen Psychiatry*. 1980;37(9):989-995. doi:10.1001/archpsyc.1980.01780220027002
13. Hoffman RS. Diagnostic errors in the evaluation of behavioral disorders. *JAMA*. 1982;248(8):964-967. doi:10.1001/jama.1982.03330080046027
14. Jones DR, Macias C, Barreira PJ, Fisher WH, Hargreaves WA, Harding CM. Prevalence, severity, and co-occurrence of chronic physical health problems of persons with serious mental illness. *Psychiatr Serv*. 2004;55(11):1250-1257. doi:10.1176/appi.ps.55.11.1250
15. Alam A, Rachal J, Tucci VT, Moukaddam N. Emergency department medical clearance of patients with psychiatric or behavioral emergencies, part 2: special psychiatric populations and considerations. *Psychiatr Clin North Am*. 2017;40(3):425-433. doi:10.1016/j.psc.2017.05.001
16. Wilson MP, Nordstrom K, Anderson EL, et al. American Association for Emergency Psychiatry Task Force on Medical Clearance of Adult Psychiatric Patients. Part II: controversies over medical assessment, and consensus recommendations. *West J Emerg Med*. 2017;18(4):640-646. doi:10.5811/westjem.2017.3.32259
17. Weissberg MP. Emergency room medical clearance: an educational problem. *Am J Psychiatry*. 1979;136(6):787-790. doi:10.1176/ajp.136.6.787
18. Anderson EL, Nordstrom K, Wilson MP, et al. American Association for Emergency Psychiatry Task Force on Medical Clearance of Adults. Part I: introduction, review and evidence-based guidelines. *West J Emerg Med*. 2017;18(2):235-242. doi:10.5811/westjem.2016.10.32258
19. Tucci VT, Moukaddam N, Alam A, Rachal J. Emergency department medical clearance of patients with psychiatric or behavioral emergencies, part 1. *Psychiatr Clin North Am*. 2017;40(3):411-423. doi:10.1016/j.psc.2017.04.001
20. Tintinalli JE, Peacock FW IV, Wright MA. Emergency medical evaluation of psychiatric patients. *Ann Emerg Med*. 1994;23(4):859-862. doi:10.1016/s0196-0644(94)70326-4
21. Schafermeyer RW, Asplin BR. Hospital and emergency department crowding

- in the United States. *Emerg Med (Fremantle)*. 2003;15(1):22-27. doi:10.1046/j.1442-2026.2003.00403.x
- 22.** Singer AJ, Thode HC Jr, Viccellio P, Pines JM. The association between length of emergency department boarding and mortality. *Acad Emerg Med*. 2011;18(12):1324-1329. doi:10.1111/j.1553-2712.2011.01236.x
- 23.** Conrad HB, Hollenbach KA, Gehlbach DL, Ferran KL, Barham TA, Carstairs KL. The impact of behavioral health patients on a pediatric emergency department's length of stay and left without being seen. *Pediatr Emerg Care*. 2018;34(8):584-587. doi:10.1097/PEC.0000000000001565
- 24.** Pearlmutter MD, Dwyer KH, Burke LG, Rathlev N, Maranda L, Volturo G. Analysis of emergency department length of stay for mental health patients at ten Massachusetts emergency departments. *Ann Emerg Med*. 2017;70(2):193-202.e16. doi:10.1016/j.annemergmed.2016.10.005
- 25.** Lukens TW, Wolf SJ, Edlow JA, et al; American College of Emergency Physicians Clinical Policies Subcommittee (Writing Committee) on Critical Issues in the Diagnosis and Management of the Adult Psychiatric Patient in the Emergency Department. Clinical policy: critical issues in the diagnosis and management of the adult psychiatric patient in the emergency department. *Ann Emerg Med*. 2006;47(1):79-99. doi:10.1016/j.annemergmed.2005.10.002
- 26.** Amin M, Wang J. Routine laboratory testing to evaluate for medical illness in psychiatric patients in the emergency department is largely unrevealing. *West J Emerg Med*. 2009;10(2):97-100.
- 27.** Szpakowicz M, Herd A. "Medically cleared": how well are patients with psychiatric presentations examined by emergency physicians? *J Emerg Med*. 2008;35(4):369-372. doi:10.1016/j.jemermed.2007.11.082
- 28.** Riba M, Hale M. Medical clearance: fact or fiction in the hospital emergency room. *Psychosomatics*. 1990;31(4):400-404. doi:10.1016/S0033-3182(90)72134-2
- 29.** Pinto T, Poynter B, Durbin J. Medical clearance in the psychiatric emergency setting: a call for more standardization. *Healthc Q*. 2010;13(2):77-82. doi:10.12927/hcq.2013.21674
- 30.** Olshaker JS, Browne B, Jerrard DA, Prendergast H, Stair TO. Medical clearance and screening of psychiatric patients in the emergency department. *Acad Emerg Med*. 1997;4(2):124-128. doi:10.1111/j.1553-2712.1997.tb03718.x
- 31.** Baren JM, Mace SE, Hendry PL, Dietrich AM, Golden RD, Warden CR. Children's mental health emergencies--part 2: emergency department evaluation and treatment of children with mental health disorders. *Pediatr Emerg Care*. 2008;24(7):485-498. doi:10.1097/PEC.0b13e31817de2bb
- 32.** Reeves RR, Perry CL, Burke RS. What does "medical clearance" for psychiatry really mean? *J Psychosoc Nurs Ment Health Serv*. 2010;48(8):2-4. doi:10.3928/02793695-20100701-06
- 33.** Han JH, Zimmerman EE, Cutler N, et al. Delirium in older emergency department patients: recognition, risk factors, and psychomotor subtypes. *Acad Emerg Med*. 2009;16(3):193-200. doi:10.1111/j.1553-2712.2008.00339.x
- 34.** Hustey F, Meldon S, Palmer R. Prevalence and documentation of impaired mental status in elderly emergency department patients. *Acad Emerg Med*. 2000;7(10):1166.
- 35.** Kaufman DM, Zun L. A quantifiable, Brief Mental Status Examination for emergency patients. *J Emerg Med*. 1995;13(4):449-456. doi:10.1016/0736-4679(95)80000-x
- 36.** Broderick KB, Lerner EB, McCourt JD, Fraser E, Salerno K. Emergency physician practices and requirements regarding the medical screening examination of psychiatric patients. *Acad Emerg Med*. 2002;9(1):88-92. doi:10.1111/j.1553-2712.2002.tb01173.x
- 37.** Zun LS, Hernandez R, Thompson R, Downey L. Comparison of EPs' and psychiatrists' laboratory assessment of psychiatric patients. *Am J Emerg Med*. 2004;22(3):175-180. doi:10.1016/j.ajem.2004.02.008
- 38.** Hall RC, Gardner ER, Popkin MK, Lecann AF, Stickney SK. Unrecognized physical illness prompting psychiatric admission: a prospective study. *Am J Psychiatry*. 1981;138(5):629-635. doi:10.1176/ajp.138.5.629
- 39.** Yun BJ, Chou S-C, Nagurney JM, White BA, Wittmann CW, Raja AS. ED utilization of medical clearance testing for psychiatric admission: National Hospital Ambulatory Medical Care Survey analysis. *Am J Emerg Med*. 2018;36(5):745-748. doi:10.1016/j.ajem.2017.10.002
- 40.** Donofrio JJ, Santillanes G, McCammack BD, et al. Clinical utility of screening laboratory tests in pediatric psychiatric patients presenting to the emergency department for medical clearance. *Ann Emerg Med*. 2014;63(6):666-675.e3. doi:10.1016/j.annemergmed.2013.10.011
- 41.** Lyu H, Xu T, Brotman D, et al. Overtreatment in the United States. *PLoS One*. 2017;12(9):e0181970. doi:10.1371/journal.pone.0181970
- 42.** Conigliaro A, Benabbas R, Schnitzer E, Janairo MP, Sinert R. Protocolized laboratory screening for the medical clearance of psychiatric patients in the emergency department: a systematic review. *Acad Emerg Med*. 2018;25(5):566-576. doi:10.1111/acem.13368
- 43.** Janiak BD, Atteberry S. Medical clearance of the psychiatric patient in the emergency department. *J Emerg Med*. 2012;43(5):866-870. doi:10.1016/j.jemermed.2009.10.026
- 44.** Parmar P, Goolsby CA, Udompanyanan K, Matesick LD, Burgamy KP, Mower WR. Value of mandatory screening studies in emergency department patients cleared for psychiatric admission. *West J Emerg Med*. 2012;13(5):388-393. doi:10.5811/westjem.2012.1.6754
- 45.** Ng P, McGowan M, Goldstein M, Kassardjian CD, Steinhart BD. The impact of CT head scans on ED management and length of stay in bizarre behavior patients. *Am J Emerg Med*. 2018;36(2):213-217. doi:10.1016/j.ajem.2017.07.080
- 46.** Bagøien G, Morken G, Zahlens K, Aamo T, Spigset O. Evaluation of a urine on-site tests of abuse screening test in patients admitted to a psychiatric emergency unit. *J Clin Psychopharmacol*. 2009;29(3):248-254. doi:10.1097/JCP.0b013e3181a45e78
- 47.** Riccoboni ST, Darracq MA. Does the U stand for sseless? The urine drug screen and emergency department psychiatric patients. *J Emerg Med*. 2018;54(4):500-506. doi:10.1016/j.jemermed.2017.12.054
- 48.** Schulz L, Hoffman RJ, Pothof J, Fox B. Top ten myths regarding the diagnosis and treatment of urinary tract infections. *J Emerg Med*. 2016;51(1):25-30. doi:10.1016/j.jemermed.2016.02.009
- 49.** Donofrio JJ, Horeczko T, Kaji A, Santillanes G, Claudius I. Most routine laboratory testing of pediatric psychiatric patients in the emergency department is not medically necessary. *Health Aff*. 2015;34(5):812-818. doi:10.1377/hlthaff.2014.1309
- 50.** Fortu JM, Kim IK, Cooper A, Condra C, Lorenz DJ, Pierce MC. Psychiatric patients in the pediatric emergency department undergoing routine urine toxicology screens for medical clearance: results and use. *Pediatr Emerg Care*. 2009;25(6):387-392. doi:10.1097/PEC.0b013e3181a79305
- 51.** Shihabuddin BS, Hack CM, Sivitz AB. Role of urine drug screening in the medical clearance of pediatric psychiatric patients: is there one? *Pediatr Emerg Care*. 2013;29(8):903-906. doi:10.1097/PEC.0b013e31829e8050
- 52.** Santillanes G, Donofrio JJ, Lam CN, Claudius I. Is medical clearance necessary for pediatric psychiatric patients? *J Emerg Med*. 2014;46(6):800-807. doi:10.1016/j.jemermed.2013.12.003
- 53.** Gregory RJ, Nihalani ND, Rodriguez E. Medical screening in the emergency department for psychiatric admissions: a procedural analysis. *Gen Hosp Psychiatry*. 2004;26(5):405-410. doi:10.1016/j.genhosppsych.2004.04.006
- 54.** Henneman PL, Mendoza R, Lewis RJ. Prospective evaluation of emergency department medical clearance. *Ann Emerg Med*. 1994;24(4):672-677. doi:10.1016/s0196-0644(94)70277-2
- 55.** Schillerstrom TL, Schillerstrom JE, Taylor SE. Laboratory findings in emergently medicated psychiatry patients. *Gen Hosp Psychiatry*. 2004;26(5):411-414. doi:10.1016/j.genhosppsych.2004.06.004
- 56.** Korn CS, Currier GW, Henderson SO. "Medical clearance" of psychiatric patients without medical complaints in the emergency department. *J Emerg Med*. 2000;18(2):173-176. doi:10.1016/s0736-4679(99)00191-2
- 57.** Tucci V, Liu J, Matorin A, Shah A, Moukaddam N. Like the eye of the tiger: inpatient psychiatric facility exclusionary criteria and its "knockout" of the emergency psychiatric patient. *J Emerg Trauma Shock*. 2017;10(4):189-193. doi:10.4103/JETS.JETS_126_16
- 58.** Trivedi TK, Glenn M, Hern G, Schriger DL, Sporer KA. Emergency medical services use among patients receiving involuntary psychiatric holds and the safety of an out-of-hospital screening protocol to "medically clear" psychiatric emergencies in the field, 2011 to 2016. *Ann Emerg Med*. 2019;73(1):42-51. doi:10.1016/j.annemergmed.2018.08.422
- 59.** Mackey KE, Qiu C. Can mobile integrated health care paramedics safely conduct medical clearance of behavioral health patients in a pilot project? A report of the first 1000 consecutive encounters. *Prehospital Emerg Care*. 2018;1-10. doi:10.1080/10903127.2018.1482390
- 60.** Shah SJ, Fiorito M, McNamara RM. A screening tool to medically clear psychiatric patients in the emergency department. *J Emerg Med*. 2012;43(5):871-875. doi:10.1016/j.jemermed.2010.02.017
- 61.** SMART Medical Clearance: a project of the Sierra Sacramento Valley Medical Society. Sierra Sacramento Valley Medical Society. <http://smartmedicalclearance.org/>. Accessed October 29, 2018.

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