“Medical Clearance” of Patients with Acute Mental Health Needs in the Emergency Department

A Literature Review and Practice Recommendations by the Wisconsin Chapter of the American College of Emergency Physicians and the Wisconsin Psychiatric Association

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ABSTRACT

Introduction: Emergency departments have seen increasing numbers of patients presenting for evaluation of acute mental illness. There is not currently 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 multi-disciplinary expert consensus recommendations to simplify and expedite the medical evaluation of patients requiring admission to inpatient psychiatric facilities.

Methods: A working group with representation from emergency physicians (WACEP) and psychiatrists (WPA) 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. First, a detailed history and physical exam should constitute the minimum necessary information required for most medical assessments. Second, clinical information should guide further diagnostic testing; therefore, receiving facility blanket requirements for routine testing should be abandoned. Third, 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. Fourth, 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. Lastly, 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 WACEP and WPA, which strongly urge affected medical providers to adopt them into routine practice.
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 non-standardized and sub-optimal practices in the assessment of medical stability of these patients, a process previously termed *medical clearance*. Current practices introduce unnecessary delays for these patients. Discussed below are the task force’s recommendations for streamlining this process in a way that is patient-centered, safe, and efficient.

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 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 visits involving mental health or substance use disorders increased substantially from 2006-2014 (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.\textsuperscript{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.\textsuperscript{7}

In Wisconsin, there are an estimated 1.45 million people coping with a psychiatric illness, yet only 20\% seek treatment. Our state alone is noted to have a shortage of 215-262 psychiatrists. The future of the profession is additionally complicated by the fact that half of all psychiatrists in Wisconsin are over 55 years old [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.

**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 non-psychiatric medical diseases that could be causing or exacerbating their psychiatric condition.\textsuperscript{8,9} Moreover, non-psychiatric medical illness, even when not impacting
psychiatric symptoms, is highly prevalent, and often under-treated, in patients with underlying psychiatric disorders like schizophrenia, bipolar disorder, and schizoaffective disorder.\textsuperscript{10} 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 two-fold: 1) identify and stabilize any non-psychiatric medical conditions that may be causing or contributing to the patient’s current symptoms (e.g. – encephalopathy/delirium, substance intoxication/withdrawal, infections, etc.); and 2) identify and stabilize any acute non-psychiatric medical illness (including exacerbations of chronic conditions like COPD or diabetes) such that the patient may be safely managed at an inpatient psychiatric setting.\textsuperscript{11,12} This process is commonly referred to as “medical clearance,” though we agree with the American Association of Emergency Psychiatry 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 Dr. 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 non-psychiatric personnel.”\textsuperscript{13}

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.\textsuperscript{14} 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 (e.g. – 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 non-psychiatric 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 non-psychiatric 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. As a cautionary tale, one study found that 10 of 298 consecutive psychiatric admissions had a non-psychiatric medical disease requiring treatment. Of
those 10 patients, eight were reported to be “medically clear,” even though their disease could have been identified during a standard history and physical exam.\textsuperscript{16}

**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,\textsuperscript{17} and has been associated with increased hospital length of stay (LOS) and mortality.\textsuperscript{18} The ED has a fixed capacity and when the inflow (i.e. – patient arrivals) outpaces the outflow (i.e. – 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 non-psychiatric complaints: one study reported mental health-related visits had a mean LOS of 446 minutes versus 128 minutes for patients with other complaints.\textsuperscript{19} 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.\textsuperscript{20}
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.12,14,21 Further, task force members with additional training in research methods performed literature searches to identify additional studies (English language only) 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. 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.\textsuperscript{14} 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.\textsuperscript{22} 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.\textsuperscript{15} It must 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 one 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. 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.\textsuperscript{23} 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 the most frequently included (75.7%).\textsuperscript{24} 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.\textsuperscript{25} This is an important area to highlight because when attempting to detect a non-psychiatric medical problem for patients presenting to the ED for a psychiatric chief complaint, history and physical exam alone detects 94% of abnormalities.\textsuperscript{26}

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 non-psychiatric 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.\textsuperscript{27} 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 non-psychiatric 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.\textsuperscript{9,28} 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. Ideally, mental status examination should include an assessment of attention, executive function, orientation, and recent memory. 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.

2. Diagnostic tests are 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. 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, and can be exhaustive, including sleep-deprived electroencephalogram (EEG). In one report of patients admitted to a psychiatric facility in the U.S. during 2010-2014, 80% had at least one medical screening test performed. 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 minutes). Furthermore, over testing
corresponds directly with over treatment, which can subject psychiatric patients to the side effects of a medical intervention without any of the benefits.\textsuperscript{37}

A review of the literature, as referenced by policy statements from ACEP and AAEP,\textsuperscript{12,14,21} would suggest that routine testing is unhelpful to the management of patients presenting to the ED with psychiatric complaints.\textsuperscript{38} 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 labs were checked for all patients admitted to an academic psychiatry ward, only one 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.\textsuperscript{39} 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.\textsuperscript{40} 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).\textsuperscript{22} Finally, in a 5-year retrospective, multi-center study evaluating the utility of head CT in patients presenting to the ED with “bizarre behavior,” but no focal neurological deficits on exam or pre-existing CNS disease, none had an acute finding.\textsuperscript{41}

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.\textsuperscript{42} 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 either used erroneously or not used at all.\textsuperscript{43} 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.\textsuperscript{44}

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 non-concerning clinical exam, 94.3\% have clinically non-significant laboratory results.\textsuperscript{45} Urine drug screens in particular have been shown to not affect management, even when positive.\textsuperscript{46,47} Yet 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 weren’t associated with a disposition change.\textsuperscript{36}

Regarding costs related to testing, a significant range has been reported: one 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.\textsuperscript{45,48}

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, this 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 pre-existing medical disorders or current medical complaints.\textsuperscript{49} Having no prior
psychiatric history is especially concerning, with one study finding that 63% of patients with a new psychiatric complaint had a non-psychiatric, medical cause, most of which was toxicologic (cocaine and amphetamines).\textsuperscript{50} Agitated patients requiring emergency intramuscular medications are another cohort which may require further investigation since they are more likely to have abnormal laboratory findings than patients not requiring these medicines.\textsuperscript{51} 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.\textsuperscript{52} Diagnostic testing in these populations may include urinalysis, complete blood count, toxicology, basic metabolic profile, chest x-ray, ECG, and alcohol level.\textsuperscript{11} When available, elevated alcohol levels may be appropriately re-assessed by breathalyzer.

3. Freestanding psychiatric facilities 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 have 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 impacting staffing or requiring advanced equipment/training, and 3. Abnormal lab results that psychiatric clinicians are not comfortable managing.\textsuperscript{53}
These variations in capacity to handle non-psychiatric 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, as well as 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. Moreover, these facilities may have limited lab testing abilities, which may be the primary reason that such testing is requested prior to patient transfer. As such, some have argued that requests for reasonable lab testing should be honored when possible, though this should not delay transfer of patients who are otherwise medically appropriate for transfer.

Further complicating access to these IMD units is the Medicaid exclusion criteria tied to their reimbursement, which is a historical factor going back to the initial time of deinstitutionalization and creation of CMS (1965). Hence, it is important to note that receiving psychiatric facilities may have some variation in their exclusionary criteria that is not actually subjective, but statutory in nature. Facility-specific exclusionary criteria should be clearly defined in regional protocols and, in the case of involuntary admissions, should not discriminate based on race, religion, language spoken, legal status, insurance status, or payer type.

4. The SMART Form is an effective tool to guide medical evaluation:

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 non-psychiatric facility.\textsuperscript{54} 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.\textsuperscript{55}

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 one study of 500 consecutive patients for whom a structured assessment was employed, only 6 (1.2%) were sent back to the ED for re-evaluation and none of them required more than an outpatient prescription.\textsuperscript{56} Though several states have offered guidance on how to conduct a structured assessment, the authors of this manuscript suggest use of the Wisconsin SMART Form (see Figure), adapted from the SMART Form, which was created by the Sierra Sacramento Valley Medical Society.\textsuperscript{57} 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 five 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 that require screening, 3) abnormal vital signs, mental status, or physical exam (which must 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 experience of the authors 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 non-physicians 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 should also 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 multi-specialty physician dialogues outside of clinical encounters can also be useful in terms of re-establishing 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 has historically 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.
REFERENCES


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