



What Physical Facilities Are Needed: The Question of Medical Clearance in Emergency Psychiatric Settings

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Abstract

The topic of medical clearance has been debated for years; traditionally, the focus has been on how to most appropriately screen psychiatric patients presenting to the medical emergency department (ED) for transfer to inpatient psychiatric units. A clear dichotomy existed between medical and psychiatric issues; however, the advent of integrated care has given this issue a more complex new shape. The need for expeditious identification of acute medical illness using history, physical exam, and basic laboratory testing, needs to be balanced with the need to monitor chronic conditions that can affect psychiatric care.

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9.1 Introduction

The quandary began in 1977, a time when there were serious questions raised about the ability of psychiatrists to conduct meaningful physical examinations [1]. McIntyre and Romano found that only 13% of psychiatrists performed physical examinations on their inpatients, and only 8% on their outpatients. Laboratory testing was not even a consideration. At that time, the field was heavily influenced by the analytic school of thought as espoused by Freud. Medical evaluations were assigned to “medical physicians” whose role was to ensure that patients were physically stable enough for admission to a psychiatric unit, oftentimes far removed from a medical hospital. Collaboration was limited at best; there was a clear dichotomy of roles and responsibilities. This status quo remained basically unchanged until the rise of the Emergency Medicine (EM) specialty in the 1980s. In the 1990s, the newly created psychiatric emergency service (PES) was expanded to include an emergency psychiatrist (EP). This new service and subspecialty role was often present in larger emergency departments, or located nearby, working closely with the EPs. These providers were not only responsible for direct care but also served a role facilitating placement of mental health patients in appropriate settings. A hospital-based PES would have access to all of the resources of the hospital; however, a PES located off-site might have none.

There was another change occurring during this period as well. State hospital systems began shedding beds, and soon they began to close. Mental health resources were moved to hospital-based programs. This consolidation of resources in medical centers allowed for more access to ongoing medical care. The pro-forma screening of admissions became relatively straightforward and associated with an admission “process” that included laboratory testing. However, the number of these mental health beds soon began to dwindle as well, and remaining beds were often moved outside of the general hospital, though possibly still within the general hospital campus. This resulted in mental health patients still being sent to the medical emergency department (ED) for disposition, but without any clear mechanism in place to process them. By 2001, patients presenting to the ED with psychiatric complaints represented about 6% of all visits [2]. Between 2007 and 2011, the rate of ED visits related to mental health and substance abuse had increased by 15% [3]. By 2015, the National Hospital Ambulatory Health Care Data reported that this number had climbed over 7% [4] representing close to six million ED visits. The reason for this was simple: patients in crisis had to be evaluated somewhere, and EDs were easily available. This increase directly contributed to the overall crowded situations of many EDs, as they traditionally lacked the resources needed to treat this population. Aside from those few facilities with PES programs, direct psychiatric care in the ED was provided on an ad-hoc basis by various hospital-based psychiatrists, if these were even available.

Many of these patients were sent directly to the ED for the express purpose of being admitted or transferred to a mental health floor. Previously established protocols or checklists were rarely updated. By this time, mental health floors had even fewer medical resources, and everyone remembered “that one case” where a

medical illness was missed during an ED screening. The term “medically clear” was fully in vogue by the early 1990s, but there was no standardized definition for this new term. In 1994, two seminal articles [5, 6] were published that examined what medically clear actually meant. No one wanted to avoid providing appropriate care, but the burden of ordering potentially unnecessary tests, and the ensuing delays this could cause, fell on the ED. The previous dichotomy had now morphed into a triangle among the inpatient service, the ED, and the EP.

9.2 Medical Clearance

A superficial look at the term “medical clearance” implies an emergency evaluation to determine whether a psychiatric patient has an active, serious medical illness that needs to be treated. Zun [7] found that EPs and psychiatrists, having different practice philosophies, essentially spoke different languages. For one set of providers, the term “medical clearance” may mean that the patient was evaluated and no medical conditions were found. For another set, it may mean that there is a known illness, but it is stable and does not need active treatment. For yet another, it may mean that there may be a medical condition that has been treated and the patient is now ready for transfer to mental health. Tintinalli [5] found that almost 80% of patients who had been labeled “medically clear” had some active, ongoing medical illness. What began as a philosophic divergence had become a clinical practice issue.

Ultimately, “medically stable” was suggested as a more appropriate term for this patient population, but even this term raised another area of complexity. Medical and psychiatric illnesses often coexist; medical illness is common in psychiatric patients, and psychiatric symptoms are common in medical conditions. A summary of the Collaborative Psychiatric Epidemiology Surveys 2001–2003 [8] noted that 25% of the adult population of the United States suffered from some form of mental disorder. Those with a medical condition constitute 58%. In the area of overlap, 68% of adults with mental disorders will have some medical condition, and 29% of those with medical conditions will have a mental disorder. Using retrospective reviews, Hall [9] and Koryani [10] found the rate of psychiatric comorbidity on the inpatient medical wards to be 40%, and these numbers have remained mostly unchanged [11].

9.3 History and Physical Examination

References on the importance of the history and physical (H&P) examination are somewhat hard to find. H&Ps are what physicians do. Obtaining a thorough H&P should not be confused with the “medical screening examination,” birthed by governmental regulatory jargon. For the purposes of this chapter, the question is whether the mental health patient with stable vital signs and no reported medical problems is considered “good to go.” The history has always been the foundation of medical practice, and nowhere is this more critical than in the medical-psychiatric patient.

These patients may not think of their medical problems as relevant, or they may not be actively taking their prescribed medications for those conditions, and, therefore, they may report that they have “no medical condition” if not specifically asked. It is unlikely that they will remember the dates of recent laboratory testing. Henneman et al. [6] pointed out that the medical history alone accurately identified 43% of medically ill patients; however, one study found that only 60% of patients accurately reported their histories [12], which brings the emphasis back to the importance of the physician’s history-taking skills.

As previously noted, certain cohorts are more at risk and these groups should be identified and examined more thoroughly. In 1984, Popkin [13] pointed out that the incidence of an “organic” mental disorder in someone under the age of 20 was approximately 10%, while in someone over the age of 80, it was over 60%. The likelihood of a primary psychiatric diagnosis in the under 20 age group was over 50%, but in the over 80 cohort it was closer to 20%.

If the history is the foundation of medical practice, the physical examination provides the material with which the physician builds the diagnoses. A young healthy patient who enters the ED with no reported history and normal vital signs may not need a more detailed evaluation; however, histories may not be complete in the emergency setting. Reeves [14] looked at a sample of ill ED patients and found that 34% had not had a complete history documented, while over 40% had not had a complete physical exam. Szpakowicz [15] noted that physical exams carried out in the ED were not complete, that vital signs were only noted in 52% of patients, and that 6% had no vital signs noted. Of course, there is a huge difference between the patient who walks into the ED and the one who arrives on a gurney. Additionally, the presence of drugs or alcohol changes the entire paradigm.

Furthermore, evaluation of the psychiatric patient in the ED reveals language barriers between specialties. The EP is worried about acute, unstable, life-threatening illness. A medical exam may be cursory at best due to the incorrect assumption that full medical coverage and follow-up will be available on the mental health unit. From the point of view of the EP, routine medical tests, essentially primary care, are not needed, take time, and waste resources. To the EP, a blood pressure of 170/102 mmHg or a glucose of 310 g/dL are simply of little interest or concern; the patient is stable! The psychiatrist, however, is looking at a patient who possibly has had no primary care, may be overweight, and is likely to be a smoker. For the psychiatrist who is probably not comfortable treating hypertension or diabetes, whose unit is unlikely to be directly attached to a medical facility, and who may not even have ready access to a primary care provider, those numbers are earth shattering.

9.4 Screening Tests

With all of these variables to consider, much has been written about the value of screening tools; however, screening tools are only as good as the screener taking the time to complete the screen and think about the results. Zun [7] proposed a fairly detailed single page checklist that prioritized history, vital signs, and a focused

physical exam. Shah [16] examined a sample of 500 patients in 2012 and determined that if the following five conditions were met, then the patient could go directly to mental health with no testing: (1) stable vital signs; (2) no psychiatric history, or under 30 years of age; (3) oriented to person, place, time, and situation, or with a Folstein Mini-Mental State Exam (MMSE) over 23; (4) no acute medical problems; and (5) no visual hallucinations. The Triage Algorithm for Psychiatric Screening proposed by Miller et al. [17] looked at: (1) age less than 65 years; (2) normal vital signs; (3) no concurrent medical conditions; (4) no recent substance abuse; (5) no history of mental retardation; (6) no history of schizophrenia; and (7) no hallucinations. While these checklists do not offer anything that a solid history and physical would not provide, they do help to quantify the discussion and provide a standard set of points to be validated.

9.5 Laboratory Testing

What testing should be ordered to properly medically screen a mental health patient? “Routine” mental health testing has come to include, at a minimum, a complete blood count, chemistry panel, urinalysis (with pregnancy), toxicology, a thyroid panel, an electrocardiogram (EKG), and a chest X-ray. However, in recent years, evidence from a growing body of literature has begun to coalesce into a more practical, clinically based approach. Of course, the bottom line will always be working with the multiple stakeholders. Ultimately, if a patient is being transferred, the accepting facility will be the final arbiter.

Henneman [6] essentially advised that, in addition to a complete history and full physical exam, a full laboratory panel including alcohol and drug screens was needed, and questioned whether a computerized tomography (CT) scan of the head and even a lumbar puncture should be part of this evaluation. Tintinelli [5], however, noted that a full history and thorough physical exam would catch the “vast majority” of acute medical conditions, and that routine laboratory testing was not needed. In 1997, Allen and Currier [18] essentially concurred suggesting that most testing should only be done if clinically appropriate. Olshaker [11] also felt that testing should be done based on a review of the vital signs, and a focused history and physical. In 2017, the American College of Emergency Physicians issued a clinical policy statement noting that testing should be guided by medical history, previous psychiatric diagnoses, and the physical examination [19]. The policy added that routine lab studies had a very low yield of positive results. These recommendations were made predicated on an awake, alert, unintoxicated patient with no significant past history.

The discussion had now moved from a simple clinical dichotomy to a slightly more complex triangle. Recently, the concept of collaborative care has been embraced; a simple medical clearance process for the mental health patient may no longer be the standard of care. The ED has become the *de facto* entry point for these patients into a complex system. To summarize, between 40% and 60% of psychiatric patients presenting to an ED have an active, ongoing medical condition that will need to be addressed in some fashion and require ongoing care [7–10].

Other medical risk factors are prevalent in the mentally ill population. Smoking is widespread, often heavy, and longstanding in nature. A sedentary lifestyle associated with institutionalization, lack of jobs or daily activities, decreased cardiovascular function, and poor diet is the norm. The incidence of obesity, metabolic syndrome, diabetes, and cardiopulmonary disease is estimated to be double that of the general population [20]. Psychotropic medications are independently associated with prolonged QT intervals [21], metabolic syndrome [22], seizures, and endocrine disorders such as hyperprolactinemia [23]. For a variety of reasons, compliance with taking medications is often less than ideal.

Despite the evidence that the yield of routine laboratory testing is very low and not cost-effective, these medical conditions will require ongoing monitoring and management regardless of where the patient is sent. In addition, most mental health units still have a very limited ability to order X-rays, electrocardiograms (EKGs), or even obtain emergency blood draws. It is entirely possible that if the much maligned “routine” tests are not done in the ED setting, it could be days before they can be performed, if they are done at all. One could therefore conclude that the basic parameters discussed so far have now shifted. The facilities should be available to allow laboratory testing as needed. More extensive testing should be considered for even the apparently healthy mental health patient. All of the routine tests discussed above may provide a valuable baseline for the accepting mental health team. A lipid panel, even if the patient has not been fasting, can shed light on an occult condition. Liver function testing, including ammonia levels, should be considered in view of the extensive hepatic metabolism of many psychotropic medications. Hemoglobin A1c levels can highlight a patient at risk for diabetes. An EKG to establish a baseline for possible QT prolongation is reasonable. A chest X-ray should be considered in any patient who smokes. Certainly, the blood levels of medications being administered should be drawn.

9.6 Summary

In summary, this chapter has traced how a clear dichotomy of clinical care and professional responsibilities changed into a triangle and has now morphed into some complex geometric figure. The emergency physician and the emergency psychiatrist in many ways now perform gatekeeper functions and need to be cognizant not just of emergency care, but also of at least some of the ongoing care that this patient population may need. The ability to obtain immediate, basic laboratory testing should now be standard, and advanced testing should be available when needed. Of particular note is the fact that the history has never been as important as it is in the current medical system, and to the current discussion. A proper physical examination will always be critical in the evaluation of a mental health patient. The emergency department has truly become an integral part of the mental health team.

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