

Integrating psychiatric PharmD services into an emergency department psychiatry team

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ABSTRACT

Typical services for psychiatric pharmacists include inpatient psychiatry units and outpatient psychiatry clinics. An increasingly common portal of entry to psychiatric hospitals, however, is the emergency department (ED). We describe a new clinical pharmacy service for psychiatric patients in the ED at our institution.

KEYWORDS

pharmacist, psychiatry, emergency service, hospital

BACKGROUND

The objective of this article is to demonstrate the effectiveness of integrating pharmacy into the psychiatric emergency department (ED) team. Specific intervention areas will be described that have proven effective with this collaboration of services with the purpose of modeling this practice approach. Clinical pharmacy services are available in a variety of settings within psychiatry. Based on the residency listings on College of Psychiatric and Neurologic Pharmacists (CPNP) and American Society of Health-System Pharmacists (ASHP) websites, common rotation sites for residents training in psychiatry include inpatient services (e.g., adult, geriatric, child/adolescent, addictions, and consult-liaison) and ambulatory clinics involving similar patients.^{1,2} One area that is not commonly covered by psychiatric pharmacists, although it is the portal of treatment for many patients, is the ED.

The benefits of pharmacists in the ED have been demonstrated for non-psychiatric patients and include avoiding adverse drug reactions, optimizing medication therapy with appropriate dosing and treatment selections, and decreasing overall drug cost.³ In 2008 ASHP released a position statement which concluded that clinical pharmacy services should be provided in every ED and that pharmacy education and residency training should be expanded to include emergency care.⁴ Suggested activities included developing medication use systems for high risk patients and procedures, promoting

evidence based medicine, educating health care professionals and patients about medications and participating in interdisciplinary team care. Additionally, ASHP released Guidelines on Emergency Medicine Pharmacy Services in 2011.⁵ Essential roles recommended by the guidelines include having a pharmacist in direct patient care rounds, reviewing medication orders, monitoring medications, involvement in utilization of high risk medications, and documenting interventions. The guidelines further described desirable roles of participating in care of boarding patients, completing medication reconciliation and medication histories. While neither the position statement nor the guidelines specifically include psychiatric pharmacists, much of the suggested care translates well to the psychiatric patient population.

Mental health and substance abuse (MHSA) associated ED visits in the United States have significantly increased since the 1990s, both in total number and percentage of ED visits. In 2007, one in every eight ED visits was MHSA related. These ED visits were more likely to result in admission (41%) than non-MHSA ED visits (15.5%).⁶ Although there is a national trend of more psychiatric patients being evaluated and boarded in the ED, numerous studies indicate that non-psychiatric clinicians in the ED rate poorly their knowledge and ability to appropriately care for psychiatric emergency patients.^{6,7} Patients with mental health disorders tend to spend more time in the ED awaiting admission, which can result in

significant delays in starting treatment to control the symptoms of the seriously mentally ill patient. Furthermore, the Emergency Nurses Association (ENA) released a White Paper which identified negative staff attitudes, lack of training in emergency psychiatry and stigma as additional factors that may adversely impact treatment of psychiatric patients in the ED.⁷ The paper recommended a psychiatric nursing position and a defined space in the ED to care for psychiatric patients. Based on the ENA and ASHP positions on ED patient care, it follows that the role of the psychiatric pharmacist in this area should expand as well.

DESCRIPTION OF THE SERVICE

The Medical University of South Carolina (MUSC) has a 98-bed Institute of Psychiatry (IOP) which serves approximately 3200 inpatients annually. While there are many portals of access to the inpatient units (e.g., direct referrals, transfers from outside hospital emergency departments), the most common is the MUSC Adult ED. Up to 50-55% of adult inpatient psychiatry admissions to the IOP come through the MUSC ED, and approximately 9% of the ED volume consists of patients with MHSA chief complaints. In the last five years, our institution has made great strides in streamlining care for psychiatric patients in the ED, but currently MUSC does not have a separate Psychiatric Emergency Service (PES). It is known that psychiatric patients need lower stimulation areas for stabilization, so a dedicated area was established in one area of the ED that is separate from trauma and critical care areas, consistent with ENA recommendations. This section of the ED is used for initial evaluation of patients with MHSA as well as for boarding patients, sometimes for several days, awaiting admission to the IOP.

Upon admission to the ED, patients are initially triaged, and then evaluated by ED physicians. If the chief complaint is determined to be psychiatric in nature, the ED psychiatry team is consulted and often assumes care of the patient. This team has the training and expertise to work with the psychiatric patients in the ED and provide a transition of care for those patients who are boarding or admitted to the IOP. It consists of an attending psychiatrist, a social worker, psychiatry residents, nurse practitioners, physician assistants and (as of January 2013) a psychiatric clinical pharmacist. This team initiates and manages comprehensive medication management comparable to what the patient receives in an inpatient psychiatry unit. Additionally, psychiatrically trained therapeutic assistants from the IOP help to provide transition of care for those who are boarding for admission to IOP.

We determined that, based on increased psychiatric patient volume in the ED, the ED psychiatric service would benefit from having a pharmacist participate with the team. In 2011, the ED psychiatry service was added as an elective rotation for our PGY2 Psychiatric Pharmacy Residency. The intent of this elective was to provide exposure to acute patient care from the ED through hospitalization and to discharge.

Based on the interventions the pharmacy residents were able to provide during this rotation, we determined the ED psychiatry service would benefit from routine clinical pharmacy coverage. This was phased into the service January 2013 and coincided with a transition to a new electronic medical record system (EMR) in our ED. The psychiatric pharmacist reviews EMR profiles for all psychiatric patients in the ED and participates in morning interdisciplinary rounds Monday through Friday. There are five primary areas the pharmacists focus on in the ED: 1) medication reconciliation, 2) transition to inpatient with complex medications, 3) clinical recommendations, 4) discharge planning and 5) systems assessments and improvements.

Medication Reconciliation

Our institution is currently in a transition period to a single EMR that will go live hospital-wide in July 2014. At the time this service was initiated, the ED had multiple electronic and paper documentation systems. While medication documentation will become more streamlined with the single system EMR, the current process has many opportunities for interventions. Psychiatric patients are often unable to provide complete and accurate medication histories and the pharmacist in the ED assists in determining the accurate home medication list (e.g., patient interview, contacting pharmacies, reviewing previous medical records and speaking with family members). While patients have a home medication list documented in the ED history, medication changes may occur while boarding in the ED awaiting admission. At times, this can lead to confusion regarding which medications were truly home medications versus ED initiated medications. One important role for the pharmacist in the ED is to ensure that medication reconciliation is accurate at all transitions of care to minimize medication errors. Complete and accurate medication histories and reconciliation will continue to be an important aspect of the pharmacist's role in the ED with the single-system EMR.

Transition with Complex and Non-formulary Medications

The inpatient psychiatry service has few medical exclusions for admission. As such, patients may be admitted who require intravenous medications, chemotherapy or complex medication regimens (e.g., immunosuppression for transplant). The campus has four inpatient pharmacies which serve various patient populations (i.e., pediatrics, psychiatry, two adult inpatient pharmacies), each stocked with medications based on patient population. Since the ED is served by an adult inpatient pharmacy, they are routinely equipped for patients with medical complexities. When patients are admitted to IOP, the pharmacy may need to arrange with the other campus pharmacies to obtain products (e.g., antimicrobials, immunosuppressants, intravenous medications). The pharmacist in the ED works directly with the IOP pharmacy to ensure that any non-standard medications are stocked and ready for patients at the time of transfer to avoid any treatment delays.

Hospital policy allows patients to use home supply of non-formulary medications. However, per protocol, home medications are sent home with family members at the point of admission if possible. The pharmacist in the ED reviews home medications to determine if home supply will be needed for any non-formulary medications, which helps avoid treatment delays due to product non-availability.

Clinical Recommendations and Discharge Planning

As with any clinical pharmacy service, our pharmacists provide therapeutic consultation regarding medication regimens. This may involve therapeutic equivalents for non-formulary medications, verifying insurance coverage prior to starting a new therapy, drug interaction screening, renal/hepatic dosing, and choosing medications based on compelling patient specific factors. Both PGY1 and PGY2 Psychiatry medical residents rotate through the ED Psychiatry service. Pre-rounds and rounds serve as optimal times to teach residents pearls of medication selection for various psychiatric conditions. Additionally, the pharmacist considers discharge planning needs (e.g., ability to obtain medications) in the initial treatment recommendations. Since patients frequently relapse due to medication non-adherence, the pharmacist can assist in determining the reason(s) for non-adherence, such as cost of medications, side effects or lack of efficacy.

Systems Improvements and Education

Our ambulatory care services transitioned to the new

EMR in 2012 and the ED transitioned in July 2013. The inpatient version of the EMR is scheduled to go live in July 2014 and at the time this service was initiated, was in the build/verification phase. Fortunately, the ED version has many similarities to the version that will be used inpatient. Order sets and protocols will be the same between the two systems. As such, we have been able to identify a number of issues with the build and have them rectified prior to inpatient go-live. Pharmacy has been integral in these improvements and works closely with both prescribers and nursing staff to identify medication related issues in the work flow. At the beginning of each month, the psychiatric ED pharmacist meets with all psychiatry medical residents and attending physicians who will encounter patients in the ED to discuss any changes (e.g., order sets, protocols) that may have occurred. Based on resident and attending physician feedback, we have updated admission order sets, alcohol withdrawal protocol orders, correction (i.e., 'sliding scale') insulin orders, and opioid detox protocol orders. Medications were added to the ED automated medication storage cabinets to facilitate rapid access for nursing staff. Additionally, guidelines for treatment of agitation including alternatives in the face of increasing sterile injectable product shortages (e.g., haloperidol, olanzapine) were developed.

SUMMARY

The psychiatric clinical pharmacist can be an integral member of the team treating psychiatric patients in the ED. As the volume of psychiatric patients assessed, treated, boarded, and admitted from the ED increases, the role of the psychiatric clinical pharmacist can be a key factor in the safe treatment of these patients. Further research is needed to demonstrate the impact a psychiatric pharmacist can have on the care of psychiatric patients in the ED.

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