Development of a discharge pharmacy service

A patient’s discharge from the hospital is a multifaceted process that can lead to several complications and challenges. According to the Centers for Disease Control and Prevention, there were over 35 million discharges throughout hospitals in 2010. A high percentage of discharged patients are prescribed medications to begin at home. Once discharged, it is the patient’s responsibility to have the prescriptions filled at a community pharmacy. Patients are also charged with the task of taking their medications properly at home. Multiple factors can lead to discharge prescriptions not being filled. The patient may not be able to find the medications at his or her local pharmacy, or the cost of the medications may be too high due to various billing and insurance issues. Furthermore, it can take up to several days after hospital discharge until the prescription can be changed to a medication that the patient can obtain or for an insurance issue to be resolved.

The focus of the discharge pharmacy has been to address the needs of the patients being discharged with the goal of improving their quality-of-life and health outcomes. This is done by offering each patient the opportunity to have his or her newly ordered medications filled onsite and to have a medication reconciliation performed before being discharged home. Every patient is offered clinical services such as medication counseling and follow-up telephone encounters. Indigent patients who cannot pay for their medications can work out an arrangement with the pharmacy and hospital to go home with their medication in hand.

The Centers for Medicare and Medicaid Services targets certain diseases because of high 30-day readmission rates. Pharmacists can play a key role in reducing readmissions when they are involved in the discharge process. A problem that afflicts hospitals nationwide is unplanned readmissions. These have led to a cost of an estimated $12 billion annually. In addition, failure to coordinate care can increase healthcare costs by $25–$45 billion annually.2

Background. West Virginia University Hospitals is a level 1 trauma center and 400-bed institution located in Morgantown with an established outpatient pharmacy. In 2011, an initiative to explore a discharge pharmacy to the hospital as a way to improve the patient services was introduced. West Virginia has one of the highest readmission rates in the country, at 19.9–26.8%.3 Staff were hired to investigate and create a discharge pharmacy with the goal to expand hospitalwide within a year. Staff explored the feasibility to reach patients, work with other healthcare teams, and integrate its technologies and software to accommodate this need and provide adequate tracking of data.

Program overview. The discharge service, which is a separate extension of the outpatient pharmacy, opened in October 2012 and operated from 7:30

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a.m. to 8:00 p.m. on weekdays and offered services on weekends and holidays. This is an expansion of the hours of operation for the outpatient pharmacy, which is open from 7:30 a.m. to 6:00 p.m. on weekdays. The hours were determined based on our hospital’s statistics to complement the hours of highest discharge rates. At that time, our target population was patients with congestive heart failure. In addition to these patients, we pilot tested our program on the cardiac unit. The program was expanded to a new unit or a new service every month (e.g., family medicine, internal medicine, oncology, pediatrics). Units were targeted based on diseases associated with the highest rates of readmission. Each unit was assessed based on a variety of factors to facilitate transition into the discharge service. Within one year, the discharge pharmacy was used hospitalwide.

Throughout the rapid expansion of the discharge pharmacy, continual staff education was necessary to ensure success in these newly expanded areas. The discharge staff led meetings and inservice programs to educate physicians, nurses, and social workers about the discharge pharmacy. Due to the nature of a teaching hospital, these meetings were held monthly as new employees rotated through various units and services. The discharge pharmacy staff found these meetings to be vital to the success of the program.

It is important that the first step of discharging a patient begins with a patient’s admission. The discharge pharmacy runs reports one to three times a day to predict who will be discharged. In addition to running reports, staff members visit each unit daily to speak with the unit clerk, care manager, or lead nurse to gather more information on patients being discharged. After consulting the reports and staff members, the discharge pharmacist or technician speaks to each of these patients to offer the discharge service. Once the patient accepts, the discharge staff begin the process of loading the patient’s vital information into the pharmacy’s software (e.g., address, drug allergies, insurance). When prescriptions are written, the discharge pharmacy staff or other members of the healthcare team, such as nurses, care managers, and unit clerks, fax them to allow the discharge team time to process the prescriptions. The nurses communicate with the discharge staff when a patient will be leaving the hospital, alerting the discharge staff to deliver the medications to the patient at that time. When the prescriptions are delivered to the patient, payment is collected in the room, and the hard copies of the prescriptions are collected.

The goal turnaround time that our staff has set is a 45-minute wait from the point faxed prescriptions are received to the time the patient leaves the hospital with medication in hand. As can be imagined, this is a very difficult time constraint to meet, because of the many challenges that can occur throughout the process. The number of prescriptions rose as the discharge service expanded, and staff were allocated appropriately to meet this turnaround time.

As previously mentioned, challenges are encountered when filling discharge prescriptions for patients. Many times, patients are being discharged on a new medication that they have never taken and therefore are unaware of prior authorizations, large deductibles that need to be met, formulary constraints, and other issues. Our staff has also shadowed other departments and participated in different committees to identify additional barriers our pharmacy encounters when offering the discharge service to patients. Some of these barriers include a patient’s uneasiness with using a pharmacy far from home and a patient’s desire to use his or her home pharmacy. Patients are often unwilling to wait for the discharge pharmacy to fill prescriptions if the patient’s are already discharged. The hours of operation were an additional barrier that we identified. Although we expanded our hours, a small percentage of patients are discharged when the pharmacy is closed. Occasionally, a challenge arises because the discharge pharmacy is unable to fill a patient’s prescription if our pharmacy is not contracted to order or dispense the medication. When this occurs, our staff works to identify what the discharge team can do in order to have this medication for the next patient who is discharged on the medication.

Our program continues to expand, and our focus has grown to include more diseases, offer medication reconciliation, and eventually offer follow-up telephone encounters. As of December 2014, the discharge pharmacy provided over 20,000 consultations, with over 10,300 being successful encounters. Our capture rate has reached as high as 66% of eligible patients.

The hospital readmission rate decreased approximately 1% since the inception of the discharge pharmacy. Although this reduction cannot be solely contributed to the discharge pharmacy, the discharge service was an instrumental part of the multidisciplinary approach to reduce readmissions hospitalwide.

**Conclusion.** A discharge pharmacy program can improve clinical outcomes through providing medication reconciliation, medication counseling, and follow-up telephone encounters.


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