
# Community Pharmacy

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## CASE

L.B. is a pharmacy student starting his first day in a community pharmacy APPE rotation. His preceptor has told him that he will be spending the morning in the pharmacy doing routine tasks the pharmacist performs to dispense prescriptions. His afternoon will be spent doing a medication therapy management (MTM) visit with a previously scheduled patient, along with other patient-focused activities. As part of his morning routine, L.B. will be required to do a return-to-stock audit on previously filled prescriptions, answer and make physician phone calls, counsel patients on new prescriptions, address drug utilization review (DUR)/clinical issues during the filling process, and perform over-the-counter (OTC) consults. All of these tasks will require L.B. to review patient pharmacy records and obtain information as needed from other practitioners. L.B. has never worked in a community pharmacy and is nervous about his ability to complete these tasks.

## Why It's Essential

Welcome to the world of community pharmacy—a continually changing arena in which to practice pharmacy. Finding ways to constantly balance the changing demands of the healthcare system and those of the retail market makes the community pharmacist position one of the most challenging and rewarding positions in the profession. The goal of the community pharmacy experiential rotation is to provide you with an opportunity to practice contemporary pharmacy in a community setting. Because a majority of graduates from pharmacy schools will practice in a community pharmacy setting, it is critical for you to obtain as much experience as possible in a structured learning environment prior to graduation to build skills, knowledge, and confidence.

Although we have numerous "controlled" simulation activities built into the on-campus curriculum, nothing compares to real-world experiences. Students typically learn the basic elements of how to practice and manage patients in the community pharmacy setting through these campus activities, their internship, and their IPPE rotations, but the APPE rotation brings everything together in 1 to 2 months and places the student on the front line. You see how a pharmacy staff manages everything from handling the prescription verification process and managing difficult patients to developing and delivering medication therapy–management services.

*"What I experienced during my rotation was much more dynamic than what I do during my internship. I now see how I can apply what I've learned in school and what's possible when I become a pharmacist."—Student*

*"Don't settle for the status quo. If you're not being challenged by your preceptor, ask about ways to get more involved."—Preceptor*

## Arriving Prepared

The following is a checklist of recommended actions prior to day 1 of your APPE community pharmacy rotation:

- Contact the preceptor ahead of time and ask for information on required readings, disease states to review, and logistical information (parking, location, etc.).
- Obtain a general understanding of the types of personnel working and the basic layout of the pharmacy. These issues are discussed in more detail in the next section.
- Formulate your own personal objectives for the rotation and determine what goals you would like to accomplish; however, ensure they are consistent with the site's objectives.
- Dress professionally; white coat and appropriate identification are mandatory at sites.
- Check with your preceptor to see if pocket reference guides or their electronic counterparts are allowed.
- Review pertinent topics prior to your first day, including drug therapy problems, patient interviewing, counseling skills, drug literature review, and statistical interpretation.
- Be familiar with the most recent treatment guidelines. These include, but are not limited to, the Seventh Report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure (JNC 7); the Third Report of the Expert Panel on Detection, Evaluation, and Treatment of High Blood Cholesterol in Adults (Adult Treatment Panel III, or ATP III); Standards of Medical Care in Diabetes from the American Diabetes Association (ADA); and Guidelines for Diagnosis and Management of Asthma from the National Heart Lung and Blood Institute (NHLBI).
- Become familiar with MTM services that might be offered. Additional detail is discussed in the MTM Consultation section later in this chapter.
- Understand the importance of the different types of communication that may be necessary.
- Be prepared for OTC consultations.

*"Preceptors appreciate when students approach the rotation with a genuine interest in learning and participating, regardless of preconceived ideas, what they've heard, or where they feel they'll end up practicing after graduation."—Preceptor*

## A Typical Day

A typical day during your community pharmacy APPE rotation will involve dispensing, patient-focused activities, and work on projects.

Dispensing activities in the community pharmacy might encompass the following:

- Assisting with processing prescriptions
- Addressing DUR and clinical messages
- Patient counseling
- OTC consults
- Phone calls to physician offices to clarify prescriptions or obtain answers to questions
- Assisting with various audits
- Immunizations (where allowed by law)

Patient-focused activities in the community pharmacy might encompass the following:

- Comprehensive medication reviews (CMRs) with patients as part of an MTM visit—either in the pharmacy or through a home visit
- Wellness screening programs (inside and outside the pharmacy)
- Community outreach events, such as presentations to nursing home residents or community organizations
- Immunization clinics
- Physician office visits to promote pharmacy-specific products and services

Projects may include the following:

- Preparing for and delivering a journal club article
- Preparing for and delivering a case presentation
- Writing a newsletter article for healthcare professionals
- Developing a community-focused presentation
- Preparation for other patient care–focused activities

## Dispensing Process

You will be expected to demonstrate effective pharmacy practice skills in order to assist with the dispensing process. This description is based on the authors' experiences and discussions with other community pharmacists. Almost all community pharmacies employ the following types of individuals:

- Pharmacists: staff and management-level professionals could be in your pharmacy.
- Pharmacy technicians: some may be certified through the national Pharmacy Technician Certification Board (PTCB) and others via state requirements; some will not be certified at all. These individuals are trained to assist the pharmacist in many activities related to prescription processing and customer service.
- Clerks: entry-level staff that are not involved in any activities related to the processing of a prescription. These individuals are usually responsible for running the cash register or similar activities.

Each of these individuals plays an integral role in every activity that takes place within the pharmacy. It is imperative that tasks be matched as closely as possible to the various individuals in the pharmacy and that everyone works together, as the volume of work can be quite challenging to manage, even with optimal teamwork and workflow. Your preceptor should find ways to introduce you to the staff and integrate you into the workflow in the appropriate areas at the appropriate time.

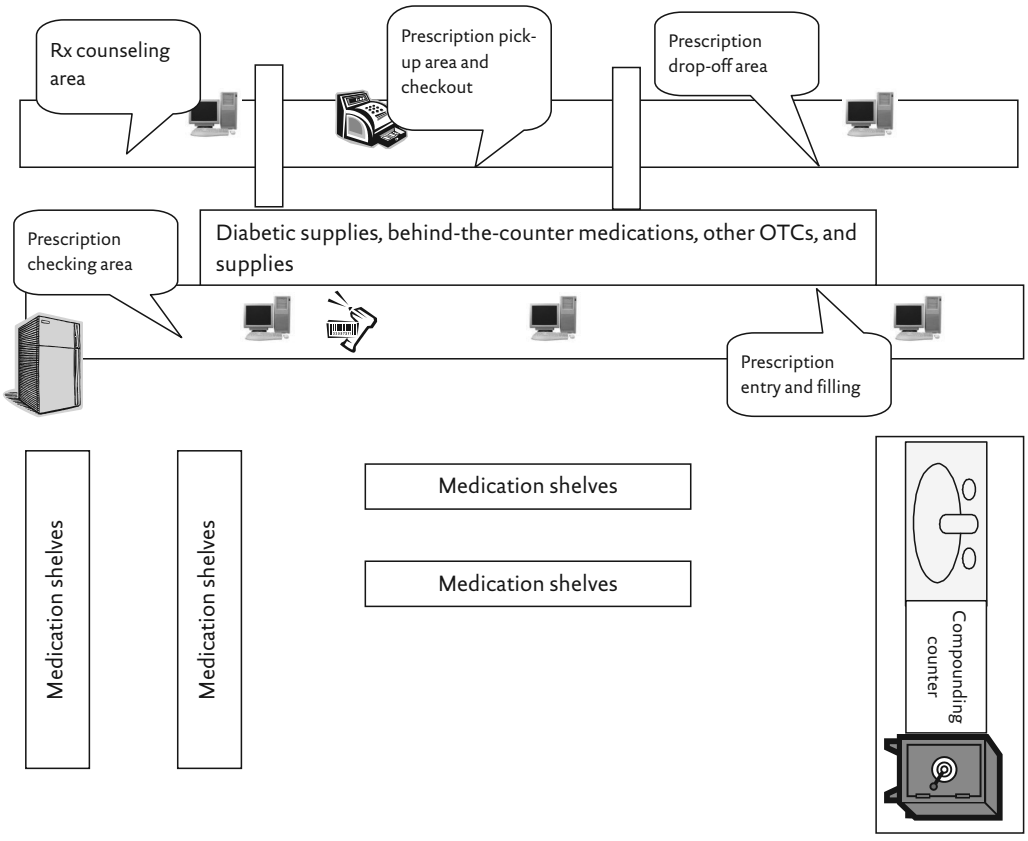
## CASE QUESTION

*L.B. would like to familiarize himself with prescription processing on his first day. Which of the pharmacy personnel would be the most appropriate to shadow?*

### Prescription Processing

Most pharmacies are designed to facilitate optimal workflow and maximize work output with minimal movement throughout the physical structure. **Figure 10-1** shows an example of a pharmacy layout, with all the critical sections needed for pharmacy activities, including the prescription drop off, a terminal for order entry, workspace for prescription assembly, a pharmacist's verification terminal, and an area for patients to pick up prescriptions.

### *Figure 10-1.* Schematic Illustrating a Common Community Pharmacy Set Up and Workflow




Prescription processing begins at a computer terminal with a software program for prescription entry and processing, label and patient advisory leaflet printing, and maintaining patient profiles and insurance information. The primary prescription entry station, often staffed by a student or technician (although sometimes staffed by a pharmacist), will be located close to the drop-off area. Prescriptions

come into the pharmacy in various ways, such as by fax, phone call, voicemail message, e-prescribing, or patient drop-off. For patients who present prescriptions in person, you should also obtain information about allergies, insurance coverage, and contact information. Oftentimes, much of this information will be obtained from a prescriber's office when prescriptions are phoned into the pharmacy. As a student, your ability to participate in taking phoned-in prescriptions and retrieving prescriptions from the voicemail system is state-specific. If you are involved with phoned-in prescriptions, be sure to follow the "repeat back" policy to verify every piece of information when speaking with a prescriber or prescriber's agent. When listening to recorded messages, review the message at least twice to verify all information. Once all of the necessary information has been obtained, the prescription is ready to be entered into the pharmacy computer system by a pharmacist, student, or technician.

Close by, the prescription assembly area is where all the paperwork and prescription information is put together. This is where the medication is counted, the bottle is labeled, and all components are prepared for the pharmacist to check. A great deal of paperwork will have been generated by this time, including, where necessary the following:

- Hard-copy prescription
- Label for the bottle, including all auxiliary labels
- Sticker/tag that is adhered to the back of the hard-copy prescription that reflects all information entered in the patient profile and is part of the permanent pharmacy record
- Patient information leaflet
- Any clinical messages that still need to be addressed by a pharmacist (or student with pharmacist supervision)
- Any documents describing insurance/copay information the patient will want to review
- Supplemental marketing pieces that complement the other drug information
- Receipt that indicates copay or other prescription price

At this point, the prescription can be filled. Once the correct drug is selected from the shelf, it is counted and placed in a vial with the correct cap (child-proof unless a snap cap is requested by the patient) and the label is applied. In busy pharmacies, there may be enough technicians involved so that the filling technician double-checks the work of the entry technician. This helps to prevent errors or problems from being passed forward. The more trained eyes that can review a prescription, the less chance errors will be made or key information missed. Oftentimes, students will be placed in the role of secondary checker prior to the pharmacist's final verification.

*QUICK TIP*

To help ensure that the proper medication is chosen from the shelves, the National Drug Code (NDC) on the prescription label should be matched to the NDC on the stock bottle.

Once everything is assembled, the items (documents, stock bottle, labeled prescription vial, and anything else) are given to a pharmacist for the final check. The final verification encompasses many steps to ensure the right drug gets to the right patient at the right dose and schedule to ensure optimal response. During this process, there are no shortcuts. Pharmacists are the last people in the healthcare system to assess the appropriateness of a prescription before it is dispensed to a patient. We must remain focused and use our training, skills, knowledge, and whatever technology is available to verify that everything about the prescription is perfect. As a student on your community pharmacy APPE rotation,

you should ensure that you pay close attention to how your preceptor manages this complex process so that you will be well prepared to complete the tasks yourself once you become a pharmacist.

## Managing Drug Utilization Review Messages

One of the first things to address during prescription verification is any DUR messages generated during the entry process. All pharmacy dispensing software systems include an application that screens for numerous clinical issues. This screening process may also be completed by software third-party payers use when claims are filed. The goal of these software programs is to provide pharmacies with information to support the safe dispensing of medications. Resolution of some or all of these problems could be performed by pharmacy students, depending on the student's training and the preceptor's comfort level with student involvement. Typically, you will be involved in addressing the more clinical (versus administrative) issues. Some of the common types of messages are included in **Figure 10-2**.

### *Figure 10-2.* Examples of DUR Messages

- Allergy warnings
- Drug interaction alerts
- Adherence issues (such as refill too soon, refill too late)
- Therapy duplications
- Inability to screen alert (if the new drug is not recognized by the software program, a message is generated stating the screening process did not take place and a manual check is needed)
- Age warnings—often for pediatric and geriatric individuals
- Dosing frequency alerts—the dose prescribed is higher or lower, or the prescription directions called for more doses per day than what is typically prescribed

*Source:* Courtesy of the Indian Health Service and the U.S. Public Health Service.

There are many ways to manage these messages. If a pharmacist is entering prescriptions, they can be addressed immediately. If technicians are entering prescriptions, the best option is to generate a printed copy of the message and allow the checking pharmacist to manage the issue. Some messages are easily addressed (verifying a dose), although many require additional effort, which normally includes a phone call to the prescriber, conversation with the patient, research using a point-of-care reference database (such as Lexi-Comp Online™), PubMed database search, phone call to a manufacturer, or any combination of these. The ultimate goal is to resolve the issue so the prescribed drug can be dispensed, replace the prescribed drug with a safer option, or seek additional follow-up with a healthcare provider before the medication is dispensed. Regardless of the outcome, it is imperative that the pharmacist (or student) documents all actions either on the prescription and/or the patient's computerized profile. Remember, if it is not documented, it never happened.

*QUICK TIP*

Getting students involved in addressing DUR messages is an excellent learning exercise. We do this frequently with our APPE students and include a practice exercise with previously generated DUR messages as an introductory activity during the first week of the rotation.

## CASE QUESTION

*L.B. has addressed a drug-interaction DUR message by calling the prescribing physician and changing a patient's medication. Now that the potential interaction has been addressed, how should L.B. document his intervention?*

### Patient Counseling

Another important aspect of the dispensing process is patient counseling. There are many ways pharmacists address this issue. Some have a staff member make the offer to counsel patients, others offer counseling to certain patients directly, and some counsel every patient regardless of whether their prescriptions are new or refills. The number of pharmacists providing medication counseling has doubled over the past 30 years, but as a profession, we are still coming up short. Not only can the counseling session be used to review a new prescription, but a quick review of the patient's profile may also uncover additional issues to discuss, such as adherence to chronic medications, response to therapy, or home monitoring.

One of the main barriers to optimizing patient outcomes with drug therapy is adherence. Numerous studies have shown that pharmacists can play a critical role in helping to improve adherence, and one way to do this is through patient counseling. Our experience has shown that counseling at the first fill of a new prescription addresses many issues the patient had not considered nor had been discussed by anyone at the physician's office. Counseling also helps establish the patient–pharmacist relationship and lets the patient know we care about him or her as a person, not just a customer.

One common approach to patient counseling is the "Three Prime Questions."[1] **Figure 10-3** lists the three prime questions to ask when patients are receiving a new drug, along with some additional issues or questions that often arise. A number of other important factors must be considered when providing effective patient counseling, such as those listed in **Figure 10-4**. It is important to remember to focus on the positive attributes of the medication more than the negative. If all you do is mention side effects, the patient is not likely to want to take the drug.

### *Figure 10-3.* Three Prime Questions Asked During a Counseling Session for a New Medication

"WHAT DID YOUR DOCTOR TELL YOU (INSERT MEDICATION NAME HERE) WAS BEING USED TO TREAT?"

Depending on the patient's response, you may have to describe this if the use is obvious (such as an Epi-Pen®) or you may need to ask the patient more questions to better determine his or her condition for a medication with multiple uses (such as lisinopril, which has multiple indications).

"HOW DID YOUR DOCTOR TELL YOU TO TAKE (INSERT MEDICATION NAME HERE)?"

Depending on response, you may need to provide additional details, such as

- Number of times per day
- Time of day
- Amount to use per dose (eye drops, creams, etc.)
- Administration in relation to meals
- Administration in relation to other medications
- How long to use (i.e., cream for 7 days, antibiotic until gone, etc.)

- What to do about a missed dose
- Storage

"WHAT TYPE OF RESPONSE DID YOUR DOCTOR TELL YOU TO EXPECT FROM (INSERT MEDICATION NAME HERE)?"

Depending on response, you may need to provide additional details, such as

- Beneficial effects to expect
- Time frame to expect benefit—when the patient will notice a change, if at all
- What to do if there is no response within the expected time frame
- Side effects that might occur
- What to do if side effects become unbearable or serious
- Who to call with questions
- What to avoid while taking the medication (sun sensitivity, foods to avoid, etc.)
- What to do if feeling better but still have some medication remaining (such as antibiotics)
- Plan for follow-up with patient's primary care provider
- Home monitoring options (for individuals with diabetes, asthma, hypertension)
- When and how to obtain refills

*Source:* Adapted with permission from The Indian Health Service and the U.S. Public Health Service.

*QUICK TIP*

It is very easy to initiate counseling by telling the patient everything you know about his or her new medication. DO NOT take this approach. Get in the habit of asking the three prime questions to determine what the patient knows and fill in the blanks.

## *Figure 10-4*. Factors That Affect Optimal Patient Counseling

- Know with whom you are speaking—your approach with a spouse, family member, or neighbor will be much different than when talking directly with the patient.
- Attempt to counsel in an area away from distractions and other patients and customers.
- Don't appear rushed—give the patient your undivided attention.
- Begin by asking the three prime questions reviewed in Figure 10-3.
- Maintain eye contact throughout the session.
- Use patient-appropriate language and visual aids or demonstrations where appropriate.
- Try to establish a caring relationship with the patient; demonstrate empathy; show respect.
- Provide supplemental materials or information (this may just be the patient information leaflet or there could be additional documents and adherence aids, such as a dropper for a liquid antibiotic).
- Ask the patient to do a "teach-back"—have the patient tell you what he or she is going to do when getting home and reinforce key information.
- Do not multitask—the counseling session should be your only priority, not also answering phones, checking prescriptions, answering questions, etc.
- Be prepared for patients with special needs, such as hearing or visual impairments or those for whom English is a second language.

The patient counseling process is one where you can get involved early and often. It is very likely that you will begin your APPE rotations with a wealth of experience in counseling patients throughout your didactic curriculum, IPPE rotations, or paid internships. You will be expected to have a core knowledge base of the most commonly prescribed medications so you can participate in patient counseling activities soon after starting your rotation, although many preceptors will provide some support activities, such as simulated practice sessions and shadowing of pharmacists providing counseling for patients. Once you are comfortable with the process and the preceptor and pharmacists are comfortable with your abilities, you can take the lead with patient counseling. Your preceptor is always a good resource to offer support, answer questions, and ensure the correct information is shared.

## CASE QUESTION

*L.B. is counseling a patient about his new antibiotic prescription. He explains that the agent may cause stomach cramping, diarrhea, and a rash. How could he improve his counseling session to emphasize the benefits of the medication and improve adherence while still covering these important side effects?*

One cannot address all the issues with patient counseling without taking into consideration one of the most important factors—patient confidentiality. The Health Insurance Portability and Accountability Act (HIPAA) of 1996 regulates the use and disclosure of protected health information (PHI), requires those with access to PHI to take appropriate steps to ensure the confidentiality of communications about PHI, and also outlines penalties for violations. In a typical community environment, there are many situations in which confidentiality must be addressed yet could be compromised. It is imperative that attention is paid to where conversations take place, who else might be within earshot, the topics being discussed, with whom you are speaking, and voice volume. When it comes to phone conversations, you may have to find a more secure environment to discuss patient-specific issues. Another area where confidentiality needs to be addressed is in the OTC medication section. This is an area where consumers can congregate, so when discussing patient-sensitive issues, try to have these conversations away from others.

As a student, you should have completed a training session on the HIPAA legislation prior to starting your APPE rotations. You may also be required to complete site-specific training. Regardless, you need to be aware of situations where confidentiality could be breached and prevent that from happening. Talk with your preceptor to ensure you are familiar with the pharmacy's policy on confidentiality and adhere to it.

### Extemporaneous Compounding

A certain subset of community pharmacies, primarily those looking to create a unique market niche, will get involved in compounding medications. The profession got its start on the basis of being able to mix various chemicals together to create medicines. With the advent of commercially available drugs from major manufacturers, the need for compounded medications has diminished but not disappeared. There are still many situations where a compounded medication is ideal, such as when a unique dosage form is needed for a particular drug, a specific dose has to be administered, a certain ingredient has to be avoided, or a mixture of multiple medications is best given at once. Some patient groups that typically benefit from compounded medications include infants and children, persons with allergies or sensitivities, women with hormonal issues, and pets without commercially available options.

Pharmacists interested in compounding usually receive additional training, set up an area specific for compounding, and focus specific resources to market and advertise their services. Oftentimes,

compounded medications provide another revenue stream, depending on volume and the role of insurance reimbursement. Certain rules and regulations govern the compounding of medications, and you should become familiar with them during your community pharmacy APPE experiences. There is a very important distinction between compounding and manufacturing. Pharmacists preparing medications for individual patients must ensure they document their activities accurately and in a timely manner. Much debate has taken place on the national stage between advocates and opponents of compounding, and more will take place. Those interested or involved in compounding must stay abreast of any proposed or enacted legislation that impacts this area of pharmacy practice.

## Patient-Focused Activities

Pharmacists have a wealth of knowledge and skills that should be utilized beyond the traditional dispensing of medications. The healthcare system is getting more complex and patients are shuffled between providers and systems without an ideal process to ensure seamless care. It has been shown that patients are much more likely to visit their community pharmacist than any other healthcare provider, so it makes sense that we try to maximize these opportunities to help. Many community pharmacists are offering services such as MTM, adherence assessments, wellness and screening programs, and detailed consultations on OTC products. These types of programs not only benefit patients but also provide pharmacists with enhanced job satisfaction, improve patient loyalty, and create opportunities to generate additional revenue.

*"Students in an APPE community pharmacy rotation should be challenged to participate in as many activities as possible that involve direct patient care. This is the future of pharmacy."—Preceptor*

### Medication Therapy Management Consultations

Patient care programs and pharmaceutical care have been in place for over three decades. These were a preface to what is now known as MTM. The Medicare Modernization Act (MMA) of 2003 was formulated to establish the Part D prescription drug plan. As a component of this plan, Part D programs were designed to provide MTM services to eligible patients. Because the law was very vague, numerous pharmacy organizations came together to develop a definition for MTM. It was defined as a distinct group of services that

> *optimize therapeutic outcomes for individual patients. MTM services are independent of, but can occur in conjunction with, the provision of a medication product. MTM encompasses a broad range of professional activities and responsibilities within the licensed pharmacist's or other qualified health care provider's scope of practice.*[2(p. 572)]

It is important to note that MTM differs from counseling at the point of dispensing, as it requires more detail than counseling on an individual prescription. MTM is not a brown-bag review as these reviews stop at the end of the session and do not require follow-up. Lastly, MTM is not a disease state management (DSM) program because it looks at the entire patient, not just one disease state.

## CASE QUESTION

*L.B. has been counseling patients more effectively and has been asked to begin working up patients in the MTM program. How do MTM services differ from traditional counseling?*

Why did MTM become necessary in the community setting? For one, the key to sustaining any business is to maintain a profit. Revenue sources for many community sites include prescriptions, OTC products, immunizations, front-end products and specialty services such as MTM consults, DSM programs, compounding, and durable medical equipment. Revenue is continually decreasing on the product side due to declining reimbursement. Therefore, pharmacies must come up with unique ways to increase their revenue sources—MTM being one option. Second, there is a need to decrease the high costs associated with adverse drug events. The high number of medications most Medicare patients take leads to an increased incidence of drug therapy problems. These can be identified by the pharmacist at the MTM visit.

*QUICK TIP*

MTM in the community pharmacy setting requires perseverance, patience, persistence, and collaboration to do what is necessary to improve patient outcomes.

Most of the patients who present for an MTM visit will be covered by Medicare Part D. The focus of this discussion will be primarily on this patient population, but it is important to remember that there may be other sources of payers for MTM, such as self-pay or private insurers. A typical patient will present with multiple medications, will have multiple disease states, and is likely to spend a significant amount of money on Part D–covered medications. To be eligible, patients have to be taking a minimum number of medications and have a minimum number of chronic diseases. Also, eligible patients must be likely to incur expenses of at least $3,000 for Part D–covered medications annually.

Medicare requires all three of these criteria to be met for patients to be eligible for MTM services. Keep in mind that these are only Medicare-defined criteria. Pharmacists can also offer MTM services to non-Medicare patients and establish a compensation structure to fit a business model. A number of third parties can be employed to connect MTM-eligible patients with pharmacists willing to provide the service, such as Mirixa, Outcomes, or PharmMD. Other insurance providers may have internal MTM programs staffed by pharmacists or nurses who deliver MTM via telephone or in person.

Services provided will vary based on patients' individual needs and pharmacist expertise. The services may also be influenced by third-party requirements. Although there is not one set formula, there are some core components that should be included, such as the medication therapy review (MTR), personal medication record (PMR), and medication action plan (MAP). The MTR is designed to collect patient-specific information and assess medication therapies to identify and prioritize drug therapy problems and create a plan to resolve them. MTRs can either be comprehensive or targeted. In a comprehensive MTR, the patient will bring in all of his or her medications, including prescription, OTC, and herbal products. These will be assessed for potential drug therapy problems, and resolution will follow. A targeted MTR addresses a specific medication problem or can be conducted for ongoing monitoring and is ideal for those patients who have already completed a comprehensive MTR. Most commonly, an MTR will be a face-to-face consultation with the patient. In-person visits are generally preferred, especially if this is the first visit with the patient. In some cases, the pharmacy may have a private room for the pharmacist and the patient to meet and discuss health-related issues. During the interview, the pharmacist will gather such information as demographics, a medical and medication history, social history, family history, immunization status, allergies, and health risk factors. Once these data are collected, the next step is to evaluate the medications for possible drug therapy problems. If laboratory values are available, they should also be assessed at this time. Once drug therapy problems are identified, a plan will need to be developed with the patient and proper education will need to take place. For a full discussion of the identification of drug therapy problems, see Chapter 13.

*QUICK TIP*

A typical MTM interview may begin with an assessment of the patient's healthcare priorities in relation to his or her medications, specifically the importance of comfort, cost, and convenience. The answer to this question may have an effect on the types of recommendations you make.

The PMR is a comprehensive record of the patient's medications (prescription and nonprescription medications, herbal products, and other dietary supplements). The PMR can be formulated to fit patient-specific needs but should include demographics, allergies, immunizations, and physician name, in addition to the medication list. The PMR should be updated on a regular basis by the pharmacist and should be given to the patient at the end of each MTM visit. It may be advisable to provide a copy to the patient's physician too.

The MAP is a document containing specific information for patients to use to aid them in resolving the drug therapy problems that have been identified. It is a list of instructions the patients need to complete, allowing them to track their progress. This document should be created in collaboration with the patient and written in patient-level language. It is important not to overwhelm the patient with this list and make sure certain problems are prioritized. Lower-priority problems may need to be addressed at future visits. The patient should be able to achieve all of the items on the action plan. To complete the MAP, proper monitoring and follow-up will need to be decided on collaboratively with the patient. Intervention or referral may be required in certain circumstances. This may include obtaining additional laboratory work, consulting with the patient's physician, or referring to another type of specialist, such as a dietician.

At the end of every encounter, proper documentation is required. Documentation can either be done by hand or on a computer system. Some programs will provide a template for the pharmacist to complete, often a variation of a SOAP note, where one collects Subjective and Objective information and then develops an Assessment and Plan. Documentation serves to facilitate communication between providers, protect against professional liability, and justify billing. It also serves as a means to track outcomes and demonstrate the benefit of the MTM service. Good communication between all parties involved and proper documentation are essential to making an MTM visit successful.

To be successful at performing an MTM visit, your therapeutic knowledge must be up to date. Some common disease states you will encounter with typical MTM patients include diabetes, hypertension, hyperlipidemia, asthma, chronic obstructive pulmonary disease (COPD), osteoporosis, pain management, anxiety, depression, and insomnia. You may also be involved in educating a patient on proper device use, immunization status, or smoking cessation programs. Once you have identified the actual or potential drug therapy problems, you will be required to formulate a plan to address these issues.

*QUICK TIP*

If your site does not have a data collection form, develop your own with your preceptor's assistance so you are efficient when conducting the interview.

## Adherence Assessments

As a pharmacist, you are in a critical position to help patients understand the vital role medications play in managing chronic conditions. Nonadherence to medications continues to be a growing concern in this country, with nonadherence rates from the low teens to more than 80%.[3-7] In the community setting, you

should be able to recognize patients that are at an increased risk for medication nonadherence, determine the cause, and apply methods to improve medication adherence. Patients who are most prone to nonadherence include those with asymptomatic disease, psychiatric disorders, advanced age, and complicated regimens. Causes of medication nonadherence may be related to a number of factors, including the patient, the condition, the therapy, socioeconomic status, or the health system. The patient may be forgetful, have other priorities, have physical barriers, or a lack of information about his or her medications. Condition-related factors may include asymptomatic diseases for which the patient sees no benefit from treatment or psychiatric conditions such as depression, which have been documented to decrease adherence. Therapy-related factors may include a complex medication regimen or adverse drug effects. Socioeconomic factors may include such things as a low health literacy level, education level, cultural beliefs interfering with taking medication, or financial barriers. All of these factors may make it difficult for the patient to be adherent to medications. For a pharmacist to tackle nonadherence issues, it is important to understand that a "one-size-fits-all" approach will not work. Each patient will present with different issues that need to be addressed to improve adherence.

*QUICK TIP*

Adherence assessments can be performed at any stage of the community pharmacy practice continuum.

Critical to improving nonadherence is performing a patient interview and truly listening to the patient. During the patient interview, you should be able to ascertain if patients believe the medication is helping them, if they are motivated to improve their current health status, and if they believe the benefits of taking the medication outweigh the risks. It will also be necessary to verify the patient can pay for the medication, understands how to take the medication, and remembers to take the medication at the correct time. Some key questions that will help you conduct the interview are listed in **Figure 10-5**.

## *Figure 10-5.* Key Questions for Assessing Adherence

- How are your medications helping you?
- What are your goals in the next few months?
- How is your health condition keeping you from achieving these goals?
- What have you been told about the benefits of your medication?
- What side effects are you having?
- Medications can be very expensive. How do you manage to pay for your prescriptions?
- Tell me (show me) how you take your medications.
- What system do you use to help you take your medication?

After a thorough interview, there are some ways to improve adherence. If financial reasons are the main barrier, it may be helpful to assess if the patient is eligible for Medicare or Medicaid. If not, there are also numerous patient-assistance programs offered that help to relieve financial burden from particular medications. You can help patients determine if they meet the criteria set forth by such programs. Some organizational systems to help patients remember to take their medications include a pill box, Doc-U-Dose®, or alarm system that can be set to remind the patient to take the medications. Other times, a phone call to the patient after a new medication is dispensed may help to alleviate any confusion the

patient may be experiencing or any side effects that may prompt a patient to stop taking the medication. Educating a patient on the benefits of the medication and how to minimize risks may help to alleviate unnecessary fear leading to nonadherence. In some cases, it may be necessary to work with the prescriber for alternative medications. Most importantly, you can work with the patient to construct a regimen that is tailored to address his or her specific nonadherence issues.

### Wellness and Screening Programs

A paradigm shift in modern healthcare is underway, from a reactive approach (treating existing disease) to a proactive approach, including preventive health, exploring lifestyle options that foster positive health behaviors, and taking the initiative to educate on these topics. This shift provides pharmacists with opportunities to offer wellness programs. What your APPE site offers will vary depending on a number of factors. Some examples of wellness screenings pharmacies offer include the following:

- Blood pressure checks
- Blood sugar checks
- Hemoglobin A1c (HbA1c) checks
- Osteoporosis evaluation (typically via heel assessment using ultrasound technology)
- Body fat analysis and body mass index (BMI) calculation
- Cholesterol tests (total cholesterol, low-density lipoprotein [LDL], high-density lipoprotein [HDL], triglycerides, or any combination)
- Medication reviews
- Nutrition and dietary reviews (often cooperatively with a dietician or nutritionist)

Our experience suggests patients are very receptive to these programs and appreciate the information and education provided. In addition to providing the screening results, additional activities and opportunities may arise. For example, if someone with diabetes stops in to have his or her blood sugar checked and enters into a discussion about his or her medications, it might be determined that there are opportunities to help optimize insulin therapy, review administration technique, or review other medications to ensure the patient is obtaining the best outcome. Others may be unaware of the services offered by modern community pharmacists until they attend a screening event. Lastly, wellness programs may help uncover undiagnosed disease states and improve patient outcomes. You may provide education about untreated disease, information to the individual's primary care physician, and follow-up to determine if the action steps recommended were completed. All of these activities are prime opportunities for students to get involved.

### CASE QUESTION

*L.B. has organized a blood glucose screening event for members of the community. One patient mentions that he has a diagnosis of diabetes and has not taken his insulin due to cost concerns. His glucose is 260 mg/dL today. How can L.B. improve this patient's care?*

## Over-the-Counter Consults

A recent study by the Consumer Healthcare Products Association (CHPA) assessed the value of OTC medications in the United States. It found that almost 80% of Americans had used at least one OTC

product during the 12-month evaluation period and that a majority (92%) stated they would seek another form of medical treatment if OTCs were not available. Considering the cost of OTCs in seven main categories and the cost of other forms of medical care and services if OTCs were not an option, the authors concluded that the total value of OTCs, including direct and indirect costs, is just over $102 billion annually.[8]

From the perspective of a community pharmacist, anyone considering an OTC product is a candidate for a self-care evaluation. Although OTCs may achieve significant savings for a majority of users, others may not be candidates for an OTC medication and should be referred to their physicians. Not only do we have many opportunities to counsel patients about their prescription medications, we also have opportunities to guide individuals in the selection of OTC products. To best determine who is and is not a candidate, there are many assessment techniques that can be used to evaluate individuals for self-care. Regardless of what technique is selected, it is important to remember that not everyone who is interested in making a purchase should do so. There are four potential outcomes from a self-care consultation based on what is in the patient's best interests, including the following:

- *Product recommendation:* an assessment suggests the condition is not serious and can be managed through an OTC product. An example is a college-aged male with a mildly sprained ankle who asks about pain reliever and anti-inflammatory options. The pharmacist determines the individual is a candidate for oral non-steroidal therapy.
- *Referral to primary care provider only:* an assessment suggests the condition is serious enough to warrant a visit to a primary care provider. An example is a middle-aged woman with frequent heartburn who has already tried a 2-week course of a proton pump inhibitor and asks what else she can use. Based on the information provided, the pharmacist tells her the next step needs to be an appointment with her physician.
- *Product recommendation and referral to primary care provider:* an assessment suggests that an OTC product may provide temporary relief until a visit to a primary care provider can be scheduled. An example is a mother whose 3-year-old daughter has had a 104.2-degree fever for a couple of days. The child should see her pediatrician, but in the meantime the use of a children's antipyretic is indicated. The key is to stress to the parent that the medication is temporary and a visit needs to be scheduled.
- *Suggest nonpharmacologic strategies:* an assessment suggests the condition is self-limiting and no medication is warranted at this time. An example is a middle-aged individual with hypertension presenting with some mild congestion, primarily in the early morning, with no other symptoms. He has a humidifier at home, and the pharmacist suggests using this for a couple days and then re-evaluating.

One assessment process used in practice is the QuEST/SCHOLAR-MAC process.[9] Elements of the QuEST/SCHOLAR-MAC process are listed in **Table 10-1**, with an example of a case study using this process.

## The Business of Community Pharmacy

### Financials

This may sound oversimplified, but if a business does not make money, it will not be in business for very long. Again, in very simple terms, the revenue coming into the pharmacy must exceed the expenses going out the door. Controlling that equation on a daily basis, with all the forces and factors in and out

## Table 10-1. Example QuEST/SCHOLAR-MAC Case Study

A young, college-aged male approaches you, the pharmacist, and asks, "What can I take for my headache?"

| Information to Obtain From the Patient | What the Patient Tells You |
|---|---|
| *Quickly and accurately assess the patient:*<br>Ask about the current problem (SCHOLAR) | |
| ***S***ymptoms<br>What are the main and associated symptoms? | "I have been studying for finals and feel like my head is going to explode." |
| ***C***haracteristics<br>What is the situation like? Is it changing? | "It is better now than it was a couple of hours ago, but I still have this dull pain in my head that won't go away." (When asked about pain on a scale of 1–10, with 10 being the most intense pain, the customer says the pain is 4.) |
| ***H***istory<br>What has been done so far? | "I laid down for a couple minutes." |
| ***O***nset<br>When did it start? | "Early this morning." |
| ***L***ocation<br>Where is the problem? | "Mostly my head, but my neck and shoulders are also achy." |
| ***A***ggravating factors<br>What makes it worse? | "Studying or reading." |
| ***R***emitting factors<br>What makes it better? | "Lying down." |
| Ask about other ***M***edications, ***A***llergies, and ***C***onditions (MAC):<br><br>Within reason, get as much detail as possible to assist in the decision-making process. | "I take a generic version of Prilosec once a day for a stomach ulcer. My doc told me to use this and he wrote me a prescription, but I buy it over the counter because I don't have insurance."<br><br>"I don't have any allergies."<br><br>"All I have is a mild ulcer, mostly when I eat the wrong stuff or have too much to drink, which isn't too often. I'm in the pre-med program and I can't afford to screw up or my dad will stop paying my tuition and I'll end up working at Chipotle." |
| **The "E.S.T" pieces of QuEST: Establish, Select, and Talk** | **Your assessment, recommendation, and counseling** |
| ***Est***ablish that the patient is an appropriate self-care candidate<br>• Any severe symptoms?<br>• Any symptoms that persist or return repeatedly?<br>• Is the patient self-treating to avoid medical care? | Based on your assessment of the patient's situation, the answers to all three questions are "no," so the patient is a candidate for self-care. |
| ***S***uggest appropriate self-care strategies | *Medication:* Because this patient has a history of ulcer disease, it is not appropriate to recommend a nonsteroidal anti-inflammatory drug (NSAID) to treat his headache. Suggest acetaminophen at a dose of 325 to 650 mg every 4 to 6 hours (no more than 3 g/day). It can be good for pain relief but has no anti-inflammatory activity.<br><br>Also recommend general care measures: rest and sleep, use ice pack, try to relax and manage stress, and try to avoid triggers. |

| | |
|---|---|
| *T*alk with the patient about<br>• Medication action, administration, and adverse effects<br>• What to expect from the treatment<br>• Appropriate follow-up | *Key Counseling Points:*<br>"Acetaminophen (which is generic Tylenol) will help relieve the pain, and you should see some pain relief within 30 to 60 minutes. Only use it when you need it because it works fairly quickly."<br>"Take with a full glass of water."<br>"It is very important that you avoid alcohol while taking this medication."<br>"Side effects are very uncommon. In very rare cases people get a minor rash. Other than that there is very little to worry about."<br>"It's important that you also try to get some time to relax, get a good night's sleep, and find some balance between the intense studying and break times."<br>"If symptoms worsen, do not get any better, or become intolerable, call your doctor. If your symptoms last for more than 10 days, that's another reason for you to call your doctor." |

*Source:* Adapted with permission from the American Pharmacists Association.

of one's control, is much more complicated. The traditional source of revenue in a community pharmacy is through the processing of prescriptions. However, with over 90% of dispensed prescriptions paid for by third parties, it is become more challenging to turn a profit in this area. Some examples of costs pharmacies incur include salaries and benefits for personnel (pharmacists, technicians, others), supplies, medications, and overhead (rent, utilities). Examples of sources of revenue include prescriptions, OTC medications, other front-end merchandise, immunizations, and patient care services (such as MTM). Considerable effort is dedicated to controlling the cost side of the business, whether it is a single-pharmacy independent or a 7,000-plus-store nationwide chain. Very small percentage discounts on supply purchases, such as labels and paper, can save hundreds of thousands of dollars annually. On the dispensing side, negotiating another few cents of reimbursement per prescription from a third party can generate significant dollars in the long run. Many community pharmacies have full-time staff dedicated solely to the financial side of the business. Hopefully, you will have an opportunity to interact with someone in this department to learn firsthand how the financial end of the community pharmacy business operates.

## Marketing

Community pharmacies can have the best staff, best products, and best services, but it may all be wasted if the community is unaware of the services offered. Community pharmacies are businesses, and, as such, they need to implement core principles of marketing, advertising, and merchandising. Pharmacies must determine how to best meet their patients' and customers' needs, wants, and demands. Needs and wants are often consumer driven, whereas the demands may be created by the business through unique strategies of offering appealing, reasonably priced products consumers may not have initially considered.

There are five core elements in the traditional "marketing mix," also known as the five "Ps": product, price, placement, promotion, and positioning. Each plays off the other, so if all are addressed collectively, a marketing strategy has a significant chance of succeeding. Many hours are spent determining what products to promote, where to promote, how to price them, and where to position them in the store. Advertising helps with carrying out a marketing strategy, but it is only one aspect of that

strategy. Many advertising avenues are available, from bag stuffers and signage in an individual store to a national advertising campaign on television or in print media. Ideally, organizations develop processes and metrics to determine the effectiveness of a particular strategy or campaign, as the return on investment is important for companies that invest considerable resources in this area. Often, however, it comes down to subjective assessments of success. From a pharmacy student's perspective, everyone in an organization is responsible for marketing and advertising through their daily work and interactions, so the messages delivered in a campaign should be consistent with the messages delivered by employees. Talk with your preceptor about the marketing strategies employed by the pharmacy where you are placed and learn how they address this important aspect of community pharmacy.

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