

Pharmacists' Impact on Patient Safety

A Joint Project of the American Pharmacists Association Academy of Pharmacy Practice and Management and Academy of Pharmaceutical Research and Science



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Background

Medications are powerful tools that, if used correctly, can prevent or treat disease. If used incorrectly, there is potential to cause great harm to people who take them. These unintended effects, called adverse effects, can occur from any medication. As health care teams, which include physicians, pharmacists, and other health care providers, are making decisions about using specific medications to treat an individual patient, they must weigh the potential risks against the desired benefit of each medication to minimize the chance of harm to the patient.

As important members of the health care team, pharmacists work collaboratively with patients' other health care providers in all types of patient care settings ranging from community pharmacies to hospitals and long-term care facilities. Across these settings, pharmacists take specific actions that regularly contribute to improving patient safety. In the United States, a pharmacist is required to complete six to eight years of education that includes training about diseases and the medications used to prevent and treat them. In addition to training on medications, pharmacist education and training includes assessing health status of patients, providing education and counseling, managing diseases, and using health

care technologies. Pharmacists use this education and training to prevent medication errors, drug interactions, and other adverse medication events from reaching patients.

The safe distribution of medication to patients, also called dispensing or filling medication or prescription orders, remains a core function of pharmacy practice. Ensuring the right dose of the right drug reaches the right patient at the right time by the right route is the minimum standard by which a pharmacist reviews every medication order for every patient. This practice is known as the “five rights”; it focuses pharmacists' attention on patient safety and requires pharmacists to thoroughly review each time a prescription or medication order is dispensed. In addition to the five rights, pharmacists have responsibilities to make sure that patients can get the medication they need and have the correct information to use the medication safely and effectively.

With the expanding number and complexity of medications, pharmacists' roles and responsibilities have expanded broadly beyond medication distribution. Pharmacists are providing patient care in almost all health care settings to help people of all ages get the most from the medications that are prescribed to them. Examples of pharmacists' patient care services include providing health and wellness screenings, managing chronic diseases, assisting patients with medication management, administering immunizations, and working with hospitals and health systems to improve patient care and reduce the number of patients who are readmitted to the hospital following their hospital stay.

Pharmacists' medication distribution and patient care services increase patients' understanding of their medications and contribute to improving patient safety.

Ensuring the **right dose** of the **right drug** reaches the **right patient** at the **right time** by the **right route** is the minimum standard by which a pharmacist reviews **every medication order for every patient**.

Pharmacists' Actions to Improve Patient Safety and the Potential Impact

As health care providers, pharmacists take an oath that reads, in part, "I will apply my knowledge, experience, and skills to the best of my ability to assure optimal outcomes for my patients."¹ Optimal outcomes include the safe use of medications resulting in the desired benefit to the patient's health. While there are many actions that pharmacists can take to fulfill this oath and contribute to optimal outcomes, this publication highlights eight specific pharmacist actions that improve patient safety within the health care system. These eight actions are routinely taken by pharmacists in daily practice across patient care settings. The actions were compiled by an expert panel of pharmacist leaders and other contributors from a variety of patient care settings. The actions are not listed in any specific order. For each action, example scenarios are provided to illustrate how pharmacists address specific patient care issues through their actions and the outcomes and the impact those actions have on patient safety.



Pharmacists contribute to improved patient safety by:

- **Ensuring medication access:** Making sure patients can afford their medications and get the medications they need
- **Supplying medication information:** Sharing information with patients and their caregivers so they can take medications safely and effectively
- **Evaluating medication appropriateness:** Assessing each medication to be sure that the medication treatment is the most appropriate, effective, and safe choice for the individual patient
- **Improving medication adherence:** Helping patients take medications as prescribed by their health care providers
- **Providing health and wellness services:** Delivering needed patient care services designed to improve the health of patients
- **Performing medication management services:** Comprehensively reviewing all of a patient's medications, ensuring that they will work together without avoidable problems, and developing an effective, well-designed treatment plan for the treatment or prevention of disease
- **Assessing patients' health status:** Determining the current status of a patient to provide treatment guidance and assess the effectiveness of medication therapy
- **Coordinating care transitions:** Assisting with care coordination and medication management coordination for patients as they transition from one care setting to another

Measuring Impact

There are many ways to measure the impact that a particular patient care action has on the patient and the health care system. While some measures, such as how many days a patient spends in the hospital, are quantifiable, others are not. For patients, the focus is often on quality of life, the cost of care, or how satisfied they are with the care they receive. In almost every case, pharmacists' actions aimed at improving patient safety result in a positive impact to the patient and the health care system.

While there are many potential positive impacts that result from pharmacists' actions, the scenarios in this publication used to illustrate each of the eight patient safety actions will highlight the following potential impacts:

- Achieved patient treatment goals
- Avoided adverse effects
- Decreased length of time patient spends in hospital or rehabilitation facility
- Decreased number of visits for emergency care
- Enhanced patient quality of life
- Improved medication adherence
- Improved patient satisfaction
- Prevented medication errors
- Reduced cost to the patient and/or health care system
- Reduced time to reach patient treatment goals

Ensuring Medication Access

The costs of health care, particularly those related to medications, can prevent patients from achieving their treatment goals. Patients may choose to skip a dose of medication or completely stop taking a medication due to cost. Since medications are an important part of managing disease, not taking them can result in patients returning to the hospital, which can be very costly for both the patient and the health care system.

Pharmacists have the knowledge and resources to help patients address medication costs. In cases where insurance coverage is an issue, pharmacists can work directly with the patient's insurance company to resolve problems. In addition, many drug manufacturers have patient assistance programs that greatly reduce or eliminate the cost of certain medications. Pharmacists can help patients enroll in these programs.



SCENARIOS: The following scenarios highlight situations in which pharmacists were able to impact patient safety by assisting with medication costs.

A patient with hepatitis C is unable to afford the copay for her newly prescribed medication, but the medication is the most appropriate treatment for the patient.



PHARMACIST ACTIONS

- Assessed patient's financial situation
- Identified patient assistance programs
- Enrolled patient in program
- Educated patient on the medication
- Facilitated delivery of medication to patient



RESULTS

- Treated hepatitis C with appropriate, affordable medication
- Avoided long-term complications associated with hepatitis C



IMPACT

- Achieved patient treatment goals
- Enhanced patient quality of life
- Improved patient satisfaction
- Reduced cost to the patient and/or health care system

An elderly woman in a nursing home is prescribed medication for allergies. Her insurance will only cover a different medication, but that medication is not recommended for use in elderly patients.



PHARMACIST ACTIONS

- Determined original medication was most appropriate based on patient age
- Contacted insurance for authorization to dispense
- Dispensed medication and counseled patient on appropriate use



RESULTS

- Treated patient's allergies with most appropriate medication
- Avoided out-of-pocket cost to the patient



IMPACT

- Avoided adverse effects
- Improved patient satisfaction
- Reduced cost to the patient and/or health care system

Supplying Medication Information

Pharmacists are medication experts and one of the most accessible members of the health care team. From over-the-counter medications to complex

medications that treat cancer, pharmacists have the knowledge to provide important medication information to patients, caregivers, and other members of the health care team. This information empowers people to safely use medications and gain the maximum benefit from their use.

SCENARIOS: The following scenarios highlight situations in which pharmacists were able to improve patient safety by providing critical medication information.

A patient newly diagnosed with asthma visits the community pharmacist with prescriptions for an inhaler and a device to test his breathing at home.



PHARMACIST ACTIONS

- Assessed patient knowledge about monitoring breathing and using inhaler
- Determined gaps in patient's knowledge
- Educated and trained patient on proper testing procedure and inhaler use
- Had patient demonstrate testing procedure and proper inhaler use to confirm understanding

RESULTS

- Patient was able to confidently manage his new inhaler and monitor his breathing

IMPACT

- Achieved patient treatment goals
- Avoided adverse effects
- Decreased number of visits for emergency care
- Improved patient satisfaction
- Reduced time to reach patient treatment goals

A hospitalized patient is being treated with several IV medications. The nurse caring for the patient contacts the pharmacist to determine whether the medications can be administered together.



PHARMACIST ACTIONS

- Reviewed medication list
- Determined which medications could be administered together
- Rescheduled dosing times
- Advised nurse of new schedule

RESULTS

- Patient received appropriate combinations of medications at the right time

IMPACT

- Achieved patient treatment goals
- Avoided adverse effects
- Decreased length of time patient spends in hospital or rehabilitation facility
- Prevented medication errors
- Reduced time to reach patient treatment goals

Evaluating Medication Appropriateness

Pharmacists use the “five rights” as a checklist for ensuring the right dose of the right drug reaches the right patient at the right time by the right route. There are many factors that can impact these five rights, including patient age, weight, ethnicity, diet, kidney and liver function, allergies to medications and other medications. Pharmacists in every practice setting evaluate each medication to ensure that the five rights are achieved and the medication is the safest and most appropriate and effective choice for the patient. They also evaluate the patient’s entire medication list to check for drug

interactions, duplication of therapy, and completeness of therapy. In some cases, pharmacists use laboratory results to determine how well a medication is working and follow up with the patient’s health care team to make any necessary adjustments.

Pharmacists also take additional steps, often through a formalized process, to ensure safety in patients using certain medications that are considered “high risk.” Examples of such medications include chemotherapy, certain blood thinners, and insulin. While the risk of errors with these medications may not be higher than with other medications, errors that do occur may be significant and result in severe adverse effects or death.



SCENARIOS: The following scenarios highlight situations in which pharmacists were able to impact patient safety by **evaluating medication appropriateness**.

A hospitalized patient with poor kidney function has an infection that requires treatment with an IV antibiotic; use of this antibiotic requires dosage adjustment and monitoring in patients with kidney problems.



PHARMACIST ACTIONS

- Obtained and interpreted lab results
- Calculated appropriate dosing for patient
- Worked with physician to initiate antibiotic
- Monitored patient and made additional dosing adjustments



RESULTS

- Patient received appropriate dosing to treat infection



IMPACT

- Achieved patient treatment goals
- Avoided adverse effects
- Decreased length of time patient spends in hospital or rehabilitation facility
- Reduced cost to the patient and/or health care system
- Reduced time to reach patient treatment goals

A patient is recently diagnosed with HIV and goes to fill his new medications at a local community pharmacy. HIV treatment requires a specific combination of several different medications. In many patients, one drug is needed to increase the ability of another drug to work best to fight the disease.



PHARMACIST ACTIONS

- Reviewed medication list and determined patient needed an additional medication to get the best results from all of his medications
- Contacted the physician and recommended to add the missing medication
- Educated patient on new therapy, importance of adherence, and how to take the medications



RESULTS

- Patient received the correct medication regimen for the treatment of HIV



IMPACT

- Achieved patient treatment goals
- Enhanced patient quality of life
- Improved medication adherence
- Prevented medication errors
- Reduced cost to the patient and/or health care system
- Reduced time to reach patient treatment goals

Improving Medication Adherence

Medication adherence refers to the extent to which patients take their medications as prescribed. Not taking medications as prescribed can cause patient harm, including adverse effects or costly hospitalizations. One of the most common reasons for medication nonadherence is simply forgetting to take a medication or forgetting to get it refilled in time. Other reasons that have been reported include younger age, medication adverse effects,

poor communication with health care team, memory loss, and confusion.²

Pharmacists are often the only member of the health care team with a complete list of a patient's medications. As a result, pharmacists can lead the process of assessing and improving medication adherence in collaboration with the patient's health care team.³ If nonadherence is suspected or documented, pharmacists are trained to work with patients to find ways for them to take their medications appropriately.



SCENARIOS: The following scenarios highlight situations in which pharmacists were able to impact patient safety by assisting patients with medication adherence.

A female patient with mental health issues visits the community pharmacy to get her medication refilled three weeks later than it should have been filled. The patient explains to the pharmacist that she feels better when she takes the medication, but she has a hard time remembering to take the doses twice a day.



PHARMACIST ACTIONS

- Determined reason patient was not taking medication appropriately
- Explored medication options that are taken once a day
- Selected appropriate drug and dose
- Contacted prescriber to request authorization to change prescription
- Dispensed new medication and counseled patient, including recommendation to use a cell phone reminder
- Monitored adherence by checking future refills



RESULTS

- Patient received a medication with a dosage schedule that was easier for her to manage



IMPACT

- Achieved patient treatment goals
- Improved medication adherence
- Improved patient satisfaction
- Reduced cost to the patient and/or health care system

A patient with long-term kidney disease receives monthly injections to keep her red blood cell count high enough for her to stay healthy. She routinely misses her clinic appointments. The patient reveals to the pharmacist that she remembers the appointments, but does not feel well for several days after receiving the injection and often misses work due to the pain.



PHARMACIST ACTIONS

- Determined reason patient was missing appointments
- Explored options for additional medication to treat pain and alternative clinic appointment times
- Recommended appropriate over-the-counter pain medication, including dose
- Rescheduled clinic visits for late Fridays to provide recovery time
- Monitored adverse effects and appointment attendance



RESULTS

- Patient no longer missed monthly injections during clinic appointments and her pain was under control



IMPACT

- Achieved patient treatment goals
- Enhanced patient quality of life
- Improved medication adherence
- Improved patient satisfaction
- Reduced cost to the patient and/or health care system

Providing Health and Wellness Services

Pharmacists are trained to provide a variety of health and wellness services, including blood pressure, blood glucose, and cholesterol screenings; immunization screening and administration; smoking cessation programs; and disease state education. All of these services ultimately improve individual patient health as well as the health of the communities in which they live. Some of these

services may be provided in collaboration with other members of the health care team.

Health and wellness services are an important part of patient safety. For example, immunizations protect patients from diseases that can often be severe and life threatening, and smoking cessation programs help patients avoid long-term consequences of tobacco use. In addition, these services may prevent patients and the health care system from incurring costs related to treating diseases that could have been prevented.



SCENARIOS: The following scenarios highlight situations in which pharmacists were able to impact patient safety by **providing health and wellness services.**

A female patient visited her community pharmacy to receive an annual flu shot. While talking with the pharmacist, she revealed that her blood pressure was uncontrolled. She was taking her blood pressure medication daily, but did not exercise or eat properly.



PHARMACIST ACTIONS

- Performed blood pressure screening to determine need for triage/immediate care
- Interviewed patient about diet and exercise habits
- Determined reason blood pressure was uncontrolled
- Recommended patient exercise regularly according to current guidelines
- Facilitated patient following up with a dietitian



RESULTS

- Patient's blood pressure was better controlled
- Long-term complications of high blood pressure were avoided



IMPACT

- Achieved patient treatment goals
- Decreased number of visits for emergency care
- Enhanced patient quality of life
- Reduced cost to the patient and/or health care system

A male patient was referred to a pharmacist-run clinic for assistance with getting his cholesterol to goal. In addition to discussing cholesterol medications and testing, the pharmacist also discussed vaccines with the patient.



PHARMACIST ACTIONS

- Reviewed medication list, cholesterol laboratory values, and vaccine history
- Determined that patient should receive a pneumococcal vaccine
- Consulted with the patient's physician about suggested changes to cholesterol medications and vaccine history
- Administered the vaccine and educated patient



RESULTS

- Patient received a necessary vaccine likely preventing pneumonia
- Patient's cholesterol was better controlled



IMPACT

- Achieved patient treatment goals
- Enhanced patient quality of life
- Reduced cost to the patient and/or health care system

Performing Medication Management Services

Pharmacists in every practice setting use their expertise to help patients manage medications and to solve medication-related problems. Medication management services can vary in complexity and include everything from identifying which medication may be causing an adverse effect to reviewing a long list of the patient's medications and making necessary

adjustments. Pharmacists may identify opportunities to simplify a patient's medication regimen, making it easier for patients to take their medications correctly. In other cases, pharmacists may identify that a patient is not reaching his or her treatment goals, and can recommend changing a medication dose, or adding or changing medications. When such opportunities are identified, pharmacists work with other members of the patient's health care team to optimize therapy.



SCENARIOS: The following scenarios highlight situations in which pharmacists were able to improve patient safety by utilizing their expertise to solve medication-related problems.

A patient with uncontrolled diabetes is referred to a pharmacist-run diabetes management clinic for help in getting her blood glucose under control. Even with regular diet and exercise, she has been unsuccessful in reaching her goals. She has been taking the same diabetes medication for two years with no adjustments to the medications or dosages.



PHARMACIST ACTIONS

- Interviewed patient about diet, exercise, and medication use
- Obtained lab results and treatment plan from physician
- Determined most appropriate combination of medications, including new medications and change in dosages
- Identified that patient is a candidate for long-acting insulin per treatment guidelines
- Recommended appropriate medication and dose
- Dispensed new medication
- Educated patient on proper use



RESULTS

- Patient received more appropriate therapy to treat diabetes



IMPACT

- Achieved patient treatment goals
- Decreased number of visits for emergency care
- Enhanced patient quality of life
- Improved patient satisfaction
- Reduced cost to the patient and/or health care system

An elderly patient with Medicare insurance visits her community pharmacist for a medication review. The patient sees several different physicians and takes several medications.



PHARMACIST ACTIONS

- Interviewed patient about medication use
- Created complete medication list
- Reviewed all medications for appropriateness, potential interactions, and any other issues
- Determined that patient was taking two blood pressure medications from two different physicians
- Contacted one of the prescribers to recommend that patient stop taking duplicate medication
- Informed patient to stop taking the duplicate medication



RESULTS

- Patient was able to eliminate a duplicate medication, making her medication regimen easier to manage and more effective



IMPACT

- Improved medication adherence
- Improved patient satisfaction
- Reduced cost to the patient and/or health care system

Assessing Patients' Health Status

Pharmacists are trained on how to assess the health status of patients, and, if necessary, refer patients for follow-up treatment with another health care provider. Pharmacists can perform a number of basic assessments, including monitoring blood pressure and heart rate, evaluating pain,

checking for complications of certain diseases such as diabetes, and others. In some cases, pharmacists may use laboratory tests to assess health status or to determine whether a medication is working safely and effectively for a particular patient. Depending on the result of the health status assessment, the pharmacist may recommend medication adjustments or lifestyle changes such as diet and exercise.



SCENARIOS: The following scenarios highlight situations in which pharmacists were able to improve patient safety by **assessing patients' health status**.

An elderly patient visits a pharmacy clinic for a blood pressure check with complaints of dizziness. He states that he has experienced this before and believes he needs a medication to treat it.



PHARMACIST ACTIONS

- Measured patient's blood pressure and determined that it was dangerously low
- Reviewed patient's medication list
- Contacted prescriber to recommend reduced dosage of blood pressure medication
- Dispensed reduced dose to patient
- Educated patient on reduced dose and monitoring of adverse effects



RESULTS

- Patient received a more appropriate dose of blood pressure medication



IMPACT

- Achieved patient treatment goals
- Avoided adverse effects
- Decreased number of visits for emergency care
- Reduced cost to the patient and/or health care system

A patient visits her pharmacy clinic for a routine follow-up visit and complains about leg swelling.



PHARMACIST ACTIONS

- Examined patient's lower legs for signs of blood clots
- Measured patient's pulse
- Asked patient about pain and/or difficulty walking
- Suspected the patient may have a new blood clot
- Referred patient to emergency department in the health facility



RESULTS

- Patient was able to seek timely care and treatment for a potentially life-threatening blood clot



IMPACT

- Achieved patient treatment goals
- Enhanced patient quality of life

Coordinating Care Transitions

As patients move through the health care system, they receive care in a variety of settings and from many members of the health care team. Some examples of care transitions include a patient moving from a home setting to the hospital or from the hospital to a nursing home. Care transitions also can occur within a particular setting (e.g., from the emergency department to an intensive care unit, to surgery, to a general medicine service).

Any time a patient is transferred from one care setting to another, there is a potential for

medication-related errors to occur. Factors such as poor communication among the health care team and low access to patient records often result in high rates of avoidable medication-related problems. Common errors during care transitions include a medication accidentally being discontinued or more than one medication being prescribed to treat the same condition. Pharmacists are often the only member of the health care team with access to the patient's complete medication list. As a result, they are uniquely positioned in the health care system to impact patient safety by managing care transitions.



SCENARIOS: The following scenarios follow one patient as he navigates through the health care system following a total knee replacement. Each scenario highlights situations in which pharmacists impacted patient safety by providing patient care in a particular practice setting and by **coordinating the patient's transition from one care setting to another.**



SCENARIO 1 >>>

A retired man was admitted to the hospital for a total knee replacement. The patient had been taking blood pressure medications and herbal supplements for cholesterol.



PHARMACIST ACTIONS

- Interviewed patient and compiled a complete medication history
- Developed a complete current medication list
- Compared the complete list with the inpatient medications prescribed for the patient
- Evaluated the inpatient list of medications for potential interactions, duplicate medications, or other problems
- Notified the physician of possible increased bleeding due to the herbal supplement
- Recommended that the herbal supplement be stopped temporarily and that the surgery be delayed by one day to minimize risk of bleeding



RESULTS

- Avoided excessive bleeding event from surgery
- Hospital stay extended by one day to avoid potential risk to the patient



IMPACT

- Avoided adverse effects
- Reduced cost to the patient and/or health care system

SCENARIO 2 >>>

Following surgery, the patient was prescribed a medication to thin his blood and prevent clots. It is time for the patient to be transferred to a long-term care rehabilitation facility. The discharge pharmacist in the hospital is currently responsible for this care transition.



PHARMACIST ACTIONS

- Had the medication filled by the outpatient pharmacy so the patient would have it during the care transition
- Interviewed the patient to assess his medication knowledge
- Provided information and education about the medications
- Created a complete list of the medications that the patient should take
- Evaluated the list of medications for potential interactions, duplicate medications, and other problems
- Informed the patient of a potential medication interaction with herbal supplement
- Advised the patient not to use the herbal supplement with the blood thinner
- Provided the medication list to the patient
- Provided a copy of the medication list and medication history to the pharmacist in the rehab facility
- Followed up with the rehab facility following patient transfer to assist with any identified medication issues



RESULTS

- Avoided potential drug interaction between blood thinner and herbal supplement
- Provided patient with medication and medication information to support adherence during care transition
- Improved coordination of care of the patient in the rehab facility aligned with the treatment plan developed in the hospital



IMPACT

- Avoided adverse effects
- Improved medication adherence
- Reduced cost to the patient and/or health care system

SCENARIO 3 >>>

While the patient is in the long-term rehabilitation facility, the facility's pharmacist monitors the patient and his medications as part of the patient's health care team. Since being at the facility, the patient has significantly changed his diet by increasing his daily servings of green leafy vegetables and spinach. These foods can interfere with how well blood thinners work.



PHARMACIST ACTIONS

- Interviewed the patient to assess his current diet and medications
- Obtained patient's lab tests for bleeding time
- Determined that the current dose of blood thinner was insufficient to achieve goal
- Calculated appropriate new dose of blood thinner
- Initiated the new dose of blood thinner in collaboration with the patient's health care team
- Educated the patient on the new dose
- Provided a new complete list of medications to the patient
- Monitored future lab tests to determine whether patient achieved treatment goal



RESULTS

- Avoided potential complications from insufficient blood thinner dose
- Provided better treatment according to established guidelines



IMPACT

- Achieved patient treatment goals
- Avoided adverse effects
- Reduced cost to the patient and/or health care system

SCENARIO 4 >>>

The patient has completed his recovery in the rehabilitation facility and is ready to be transitioned back to home. The patient must continue to take the blood thinner and blood pressure medication for the foreseeable future. The pharmacist in the rehabilitation facility prepares the patient for discharge and arranges for continued care.



PHARMACIST ACTIONS

- Interviewed the patient to assess his medication knowledge
- Provided information and education about the medications
- Created a complete list of the medications that the patient should take
- Provided the medication list to the patient
- Provided a copy of the medication list and other medication information to the patient's community pharmacist
- Followed up with patient's community pharmacist after the transfer home to assist with any identified medication issues and long-term patient monitoring needs



RESULTS

- Avoided potential complications from patient self-management of medications at home
- Increased awareness and involvement of the patient's community pharmacist in the long-term management of the patient



IMPACT

- Avoided adverse effects
- Improved patient satisfaction
- Prevented medication errors
- Reduced cost to the patient and/or health care system

SCENARIO 5

The patient has been transitioned to the care of his community pharmacist. He must continue to take the blood thinner and blood pressure medication for the foreseeable future. Ongoing care will be provided by his community pharmacist for management and continued monitoring of his medications.



PHARMACIST ACTIONS

- Interviewed the patient to assess his medication knowledge
- Provided information and education about the medications
- Created a complete list of the medications that the patient should take
- Provided the medication list to the patient
- Followed up with the patient to ensure adherence to care plan



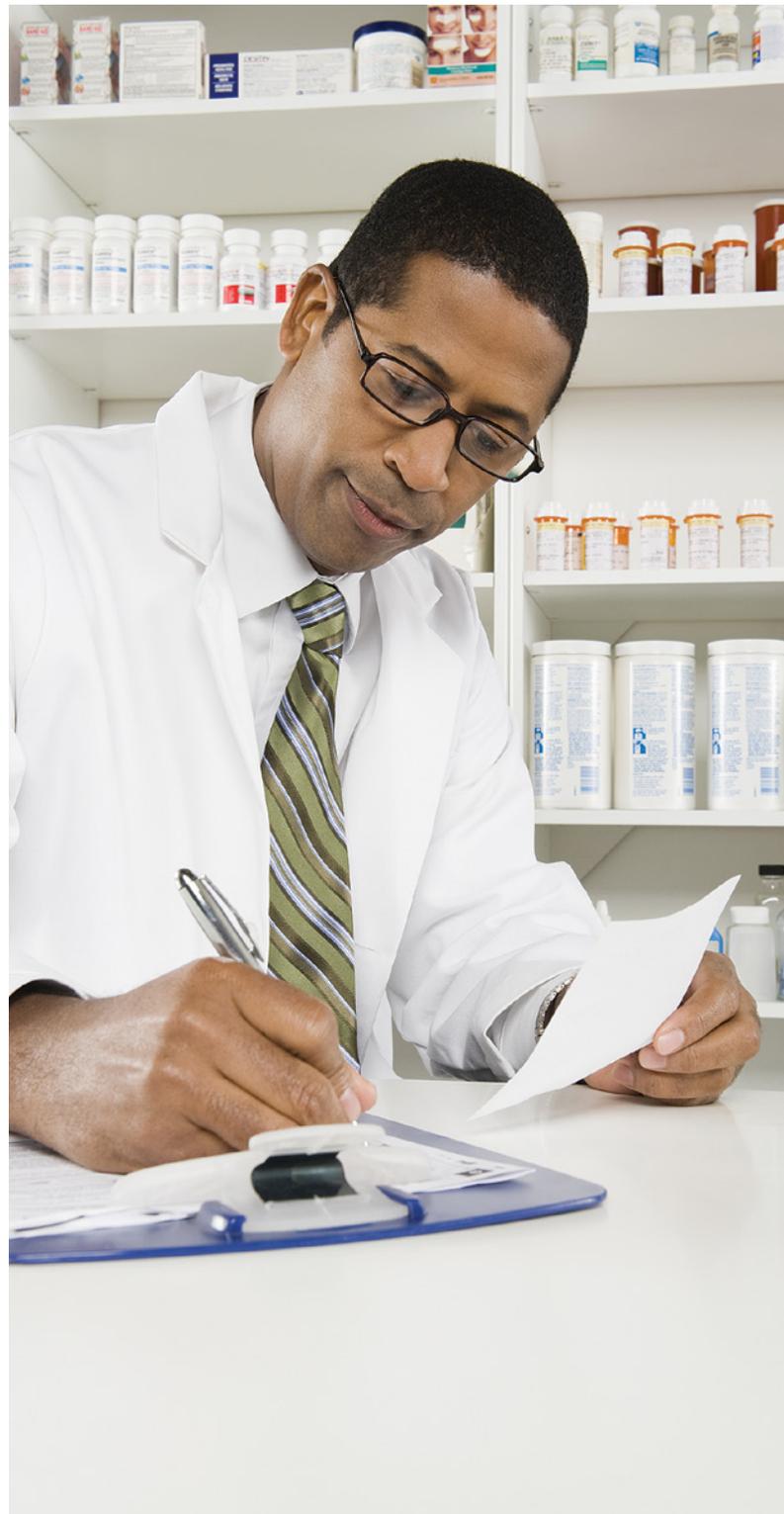
RESULTS

- Patient was better able to manage medications
- Avoided long-term complications of not taking blood thinner appropriately



IMPACT

- Improved medication adherence
- Improved patient satisfaction



Conclusion

These real-world examples of patients who were safer because a pharmacist was involved in their care provide only a small glimpse of the patient care that nearly 300,000 pharmacists across the United States provide every day. In almost every case, pharmacists' actions aimed at improving patient safety resulted in a positive impact to the patient and to the health care system.

In some of the scenarios, many impacts are listed while in others only a couple. But even one impact causes a ripple effect and the difference is improved patient care. For instance, improved medication adherence doesn't just stop at a patient remembering to take a medication. That patient then has better control of the disease and, hopefully, by doing so, is less likely to need hospitalization or emergency care, has improved quality of life, and has decreased overall health care costs.

It is important to note that, in many cases, outcomes improve when patients are involved in their own care. Patients can get engaged in their care by providing complete information to pharmacists and other health care providers. This information will assist the health care team in making the best decisions related to patient treatment goals and medications.

As health care becomes increasingly complex, utilizing the skills and expertise of all members of the health care team is a must. When it comes to helping patients manage medications, it is critical that pharmacists be part of the health care team. In community pharmacies, clinics, hospitals, long-term care facilities, and beyond, pharmacists use their extensive education and training to make valuable contributions to patient care and patient safety.

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Notes

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