

OHIO'S



MTM

 Medication
Therapy
Management

STORY



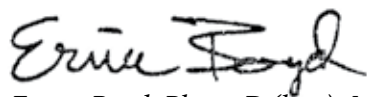
Pharmacists Transform Healthcare in Ohio

Pharmacists play a vital role in the treatment of patients' chronic medical conditions. Patients who receive face-to-face communication with a pharmacist visit the emergency room less often and have fewer admissions to the hospital.

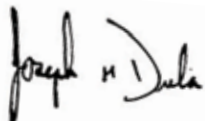
As healthcare services continue to evolve, pharmacists are uniquely positioned to make a remarkable impact on patient outcomes and the cost of treatment. Pharmacists are consistently ranked as one of the most trusted professionals and are a readily accessible advisor. The role of the pharmacist continues to focus on the delivery of education and care. In greater numbers, pharmacists are managing medication therapies in many common diseases including diabetes, heart failure, and chronic obstructive pulmonary disease (COPD). When the pharmacist focuses on medication education, adherence, and prevention of adverse drug events, better health can be achieved.

At the Ohio Pharmacists Association, pharmacists who provide these services (known collectively as "Medication Therapy Management" or "MTM") were asked to submit examples of the impact in their professional practice. We were pleased to receive responses from more than 100 different sites across the state of Ohio! This directory was created to showcase, by Ohio Senate District, the effect of several of these interactions with pharmacists. Each MTM "story" speaks to an individual encounter that improved the health of someone like you, your neighbor or family member. Reading through each story shows the positive influence that a pharmacist can have on the healthcare system and patient lives.

Across the country, pharmacists are being relied upon more than ever before as a result of their positive impact on patient outcomes. Expanded and enhanced pharmacist services are a big part of the future of healthcare. This is "Ohio's MTM Story".



Ernest Boyd, PharmD (hon), MBA
Executive Director
Ohio Pharmacists Association



Joe Dula, PharmD, BCPS
Chair, Medication Therapy Management Committee
Ohio Pharmacists Association



Cathy Kuhn, PharmD
Vice-Chair, Medication Therapy Management Committee
Ohio Pharmacists Association

** Please note: Names have been changed throughout in order to protect patient privacy.

C ontents

Did You Know? 3

Featured Locations 4

Stories (by Ohio Senate District)..... 5-18

District 1, 2 5

District 3, 5 6

District 7, 8 7

District 9, 10 8

District 11, 12 9

District 13, 14 10

District 15, 16 11

District 17, 18 12

District 19, 21 13

District 22, 23 14

District 25, 26 15

District 27, 28 16

District 29, 31 17

District 32, 33 18

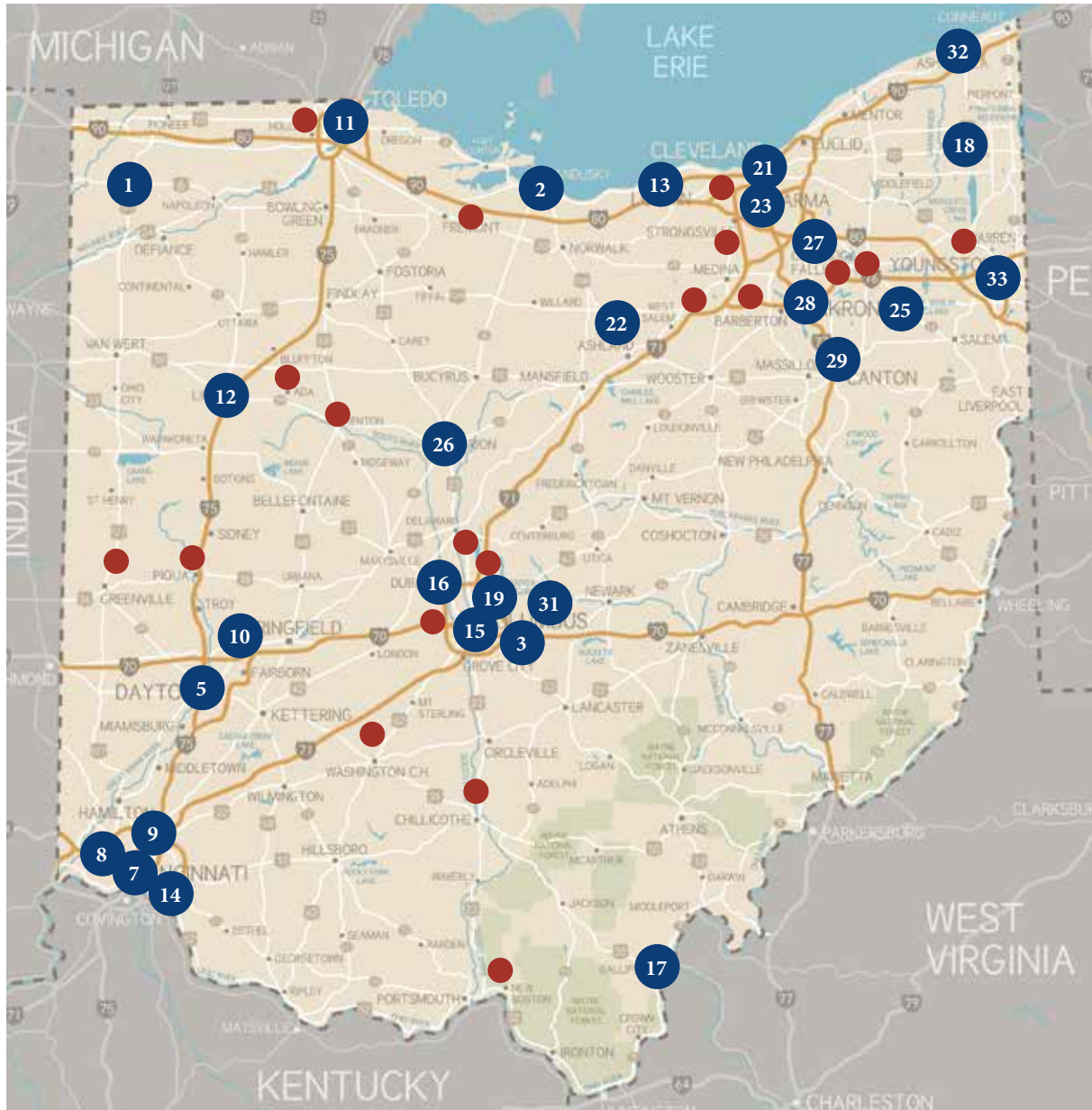
Glossary 19

Acknowledgements 20-22

Did You Know?

- Pharmacists are medication experts!
- Pharmacists practice in many different settings including outpatient doctors' offices, retail pharmacies, hospitals, long-term care facilities and mail-order pharmacies.
- There are only 300,000 pharmacists practicing in the United States but there are nearly 700,000 physicians practicing in the United States.
- Becoming a pharmacist requires six to eight years of college and current students graduate with a doctoral degree.
- Pharmacists frequently work with physicians, nurse practitioners, and other healthcare professionals to provide care for patients.
- In Ohio, all pharmacists are licensed through the State Board of Pharmacy and are required to complete 60 hours of continuing education every three years.
- By law, pharmacists in Ohio are able to administer all CDC-recommended vaccinations.
- Some pharmacists work in very specialized settings such as cardiology, oncology, nephrology, or infectious disease.
- Based on the most recent statistics available, more than 10% of Ohioans have been diagnosed with diabetes. An additional 7% of Ohioans have pre-diabetes.
- The estimated cost of diabetes in Ohio is nearly \$6 billion annually.
- More than 33% of Ohioans have been diagnosed with high blood pressure. The national average for high blood pressure is approximately 28%.
- Ohio had the 15th highest prevalence of high blood pressure among the 50 states in 2011.
- About 39% of adults in Ohio have high cholesterol.
- Heart disease is the number one killer in the State of Ohio.
- Stroke is the number four killer in the State of Ohio.
- More than 26,000 Ohioans die of heart disease each year.
- Ohio is ranked 39th in the nation for overall health.

Featured Locations



District 1 - Bryan
 District 2 - Sandusky
 District 3 - Whitehall
 District 5 - Dayton
 District 7 - Cincinnati
 District 8 - Cincinnati
 District 9 - Cincinnati
 District 10 - New Carlisle

District 11 - Toledo
 District 12 - Lima
 District 13 - Lorain
 District 14 - Amelia
 District 15 - Columbus
 District 16 - Dublin
 District 17 - Gallipolis
 District 18 - Ravenna

District 19 - Columbus
 District 21 - Cleveland
 District 22 - Lodi
 District 23 - Parma
 District 25 - Maple Heights
 District 26 - Marion
 District 27 - Stow

District 28 - Akron
 District 29 - North Canton
 District 31 - Pataskala
 District 32 - Ashtabula
 District 33 - Youngstown

● = Locations that submitted stories.
 See acknowledgements on page 20.

Stories

District 1

Site: Bryan Community Health Center Pharmacy
200 Van Gundy Drive, Bryan, Ohio 43506

Story: Andy is a 60-year-old man who was recently started on lisinopril for his high blood pressure and atorvastatin for his high cholesterol. He came into the pharmacy today just to check in because he had been on his medications for two weeks. I asked him how he was feeling. He told me that he was really achy and felt like he had run a marathon. He said he was worried about holding his granddaughter because he felt like he might drop her. When I asked him about how long this had been going on he stated that it started shortly after he started taking his two new medications. I started to get worried at that point because I know that atorvastatin can cause muscle aches and it seemed like Andy's muscle aches could be caused by the medication. I talked to him about how his new cholesterol medication can cause muscle aches and I asked him if it would be alright if I called his doctor. He agreed but he couldn't wait at the pharmacy for a response because he had to get to work. I told Andy I would call him as soon as I heard from his doctor's office.

Pharmacist Intervention: As a pharmacist, I understand the side effects that medications can cause. When Andy told me about his muscle aches, I was concerned that maybe it was being caused by his new cholesterol medication, atorvastatin. Catching this side effect early saved Andy from more serious muscle aches and possible kidney damage that can be caused if this had gone on for a long period of time.

“I thought I had just done too much playing with my granddaughter! I had no idea that my new medication could be causing so much pain in my legs. I am grateful to the pharmacist for straightening this out!” – Andy

Outcome: Andy's doctor called me back later that day and we discussed his muscle aches. The doctor agreed that the muscle aches could be caused by the atorvastatin. He decided to have Andy stop taking the medication and try a different cholesterol medication instead. I called Andy right away to let him know that he should stop taking his medication.

District 2

Site: Center for Coordinated Care
1221 Hayes Avenue, Sandusky, Ohio 44870

Story: One of our most stable patients, Sallie, came to the Coumadin clinic two days ago to have her INR monitored. The INR tells us how thin the patient's blood is and lets us know if we need to adjust the patient's dose of Coumadin. Sallie had been stable on her dose of Coumadin for a long time, and had many previous stable INR values. But when I reviewed her labs, I suddenly noticed her INR had jumped a lot! I asked her if she had any other medication or diet changes recently, because many other medications and foods interact

“I knew I needed to let the pharmacist know if I started or stopped any medications, but I never would have thought that quitting smoking would make a difference!” – SM

with Coumadin and can cause a change in INR. She said she didn't have a single medication change, and her diet was the same as all of her previous visits. I asked her to stop her medication for a couple of days until her INR value came back down, but today when she came back to clinic her INR was still high. Her high INR put her at risk for bleeding, so I was really worried and wanted to figure out what was going on! It turns out that she quit smoking two weeks ago. Just like other medications and many foods, cigarette smoking can affect the INR greatly. Because this patient was a heavy smoker, she required a higher dose of blood thinner medication while she was smoking, but now that she quit she would need a much lower dose. I was so happy that we identified that she quit smoking! We decreased her dose and I'm confident that her INR won't be high next time she comes into the clinic!

Pharmacist Intervention: Sallie's increased INR put her at risk for bleeding. This can be potentially dangerous because bleeding can occur without the patient realizing it and cause life-threatening complications. Identifying the cause of the increased INR and changing her Coumadin dose was crucial to decreasing Sallie's risk of stroke, while also making sure she wasn't at increased risk of bleeding.

Outcome: The patient's dose was successfully decreased and her INR is headed back into optimal range.

District 3

Site: Whitehall Family Health Center
882 South Hamilton Road, Columbus,
Ohio 43213

Story: A new patient came to the diabetes clinic and I was really excited to get to know him. His name is Rick and he's a 45-year-old Hispanic gentleman. He told me about his two kids, his new landscaping business and his recent move from Virginia. He also told me that he is really concerned about a weird pain and tingling feeling he is having in his feet. Yesterday he wasn't able to finish a landscaping job because of it. After some discussion, he also told me that he can't afford the insulin he was prescribed, and that his blood sugars have been between 300 and 350 every day. I explained to him that the pain in his feet could be caused by his elevated blood sugars. We talked about changes in his diet that could help reduce his sugars, and how important it is to take his insulin as prescribed. I described how lowering his sugars will help his feet feel better. I helped him sign up for medication assistance to get his insulin for free. I also contacted his primary care physician, and recommended a medication called gabapentin to help with the pain.

Pharmacist Intervention: The tingling the patient was feeling could lead to worsening pain and destruction of tissue in his feet as long as his blood sugars remained elevated. Identifying that there was a way to stop the pain from getting worse and a medication to help with the pain really improved the patient's quality of life.

“Thank you so much! The medications have really helped me feel better and now I can get back to work!” – RJ

Outcome: The primary care physician prescribed the medication to help reduce the patient's pain. Also, the patient received his insulin for free and was able to get his blood sugars under control.



District 5

Site: Victor J Cassano Health Center
165 South Edwin C. Moses Boulevard, Dayton, Ohio 45402

Story: In a shared medical appointment with Dr. George today, I saw Frankie, a 52-year-old African American patient again for a follow-up visit. She came in today because she was worried about swelling that recently started in her legs. She keeps a close eye on her health because her sister died at the age of 44 from complications of diabetes and Frankie also has diabetes. When Dr. George and I looked at her legs, I was surprised at how swollen they were compared to the last time we saw her. She was taking two diabetes medications, pioglitazone and metformin, a blood pressure medication called amlodipine and a high-dose water pill called furosemide. I realized that one of her diabetes medications and her blood pressure medication could be causing the swelling. I talked to Dr. George about switching to different medications that would help control her diabetes and blood pressure, but wouldn't cause swelling. He agreed that we needed to make a change because the patient had such serious swelling in her legs.

“I didn't ask for diabetes, but I knew that I had to ask for help to learn how to live with it. Talking to my pharmacist during the shared diabetes appointment with Dr. George has literally been the difference between life and death for me.”

Pharmacist Intervention: Using my previous clinical experience and drug knowledge, I created a new medication regimen that would keep Frankie's diabetes and blood pressure controlled, but would be less likely to cause swelling.

Outcome: Dr. George accepted my recommendation on the spot! We discussed the changes with Frankie before she left the clinic and sent new prescriptions with her so she could get started on her new medications right away. We also scheduled her for another follow-up appointment in two weeks to check with her and see how her new medication regimen is working.

District 7

Site: Kroger Pharmacy
Mt Washington, Cincinnati, Ohio 45230

Story: I had a great day today! A favorite patient, Brenda, came in for refills. She's one of our diabetes success stories! She's a 54-year-old African-American woman who was diagnosed with Type 2 diabetes about 20 years ago. She participated in Kroger's Diabetes Coaching program three years ago and at that time her A1c was 10.2%. She wasn't sure what foods she should be eating and which she should avoid. She also wasn't taking her insulin the way the doctor prescribed it. As part of the program, we worked with her physician to adjust her insulin regimen and educated her about changes she could make to her diet that would help her blood sugar numbers. We taught how to use her insulin pens and made sure she didn't run out of medication. We even discussed how exercise can help diabetes. After finishing the program she reached her goal A1c of 7.0%! I am so happy to see her doing so well. It made me realize how much we help people in our coaching program!

"On a scale from 1-10 I would give my pharmacist a 10+! He takes a genuine interest in me and answers all of my questions! If he moves pharmacies I'll be moving with him!"

Pharmacist Intervention: Although Brenda had been a diabetic for 20 years, she really didn't understand much about the disease. Teaching her about diabetes empowered her to take control of her health. She now enjoys improved quality of life and a reduced risk of heart disease by having her blood sugars under control.

Outcome: Three years after enrolling in the Diabetes Coaching program Brenda's blood sugars are still at goal! She is doing a great job managing her diabetes and frequently encourages other Kroger patients to participate in the coaching program too!

District 8

Site: Kroger Pharmacy
Cincinnati, Ohio 45238



Story: Tony, a 35-year-old Kroger associate, came in for a wellness screening a couple of months ago. He had been healthy overall, but while I was doing his screening he told me that he was having some blurry vision. He had just been to the eye doctor and his prescription hadn't changed so he wasn't sure what was going on. As part of the screening, I tested his blood sugar and it was over 400! That is more than twice what a normal blood sugar should be! Both Tony's mom and dad have diabetes but he thought he was way too young to have to worry about his blood sugar. I called his doctor immediately and enrolled him in Kroger's Diabetes Coaching program. At his first coaching visit he told us that his doctor had started him on insulin and that his A1c was 7.6%. After two monthly coaching visits his A1c was down to 6.2% - below his goal of 6.5%! I can't believe how far he has come in just 3 months.

Pharmacist Intervention: Identifying Tony's elevated blood sugar early and getting it under control reduces Tony's risk of heart attack, stroke, nerve damage and kidney damage. His quality of life has improved because he has more energy at home and work.

Outcome: We worked closely with Tony's doctor to get him started on insulin. We also taught Tony about changes he could make to his diet and encouraged him to be more active because both diet and exercise can have a huge impact on blood sugars!

"Thank goodness for the pharmacists here! I feel so good that I think I'm going to try to quit smoking next!"

District 9

Site: Kroger Pharmacy
North College Hill, Cincinnati, Ohio 45230

Story: Working in a community pharmacy, I see hundreds of patients a day. Many of those patients don't have access to any health care provider but me on a regular basis. Today, Paul came to the pharmacy to fill his prescriptions. I was helping with his transitions of care because he had just been discharged from the hospital after having a heart attack. He was scared and nervous. He wasn't sure how to take all of the new medications he had been prescribed. I reviewed his medications and noticed that he had two cholesterol medications, simvastatin and atorvastatin, in his profile. He was sure he was supposed to take both. I knew that these medications are not usually used together so I requested to see his discharge papers from the hospital. Unfortunately, Paul couldn't find the paperwork he received when he left the hospital. I asked him to hold on for a few minutes while I called to double-check the medications. Sure enough, the nurse said they wanted him to stop the simvastatin and start taking the more potent atorvastatin because of his recent heart attack. With all of the recent changes in Paul's life, he hadn't paid much attention to his changed medications.

"Medications were the last thing on my mind after having a heart attack! I am so lucky to have a wonderful pharmacist to help me with all of these changes!"

Pharmacist Intervention: Identifying this duplicate therapy while Paul was transitioning from being in the hospital to going back home prevented potentially serious side effects that could have occurred if he had taken both medications. Also, because Paul met with me to review all of his medications, I was able to answer all the questions he had about the four new medications he had been started on since his heart attack.

Outcome: Paul understands that it is very important that he takes his medications to help prevent another heart attack. He has a better understanding of why he is taking each one and knows he can ask me questions as needed.

District 10

Site: New Carlisle Community Health Center
106 North Main Street, New Carlisle, Ohio 45344

Story: Last week, RJ and Maria came in to fill their prescriptions for all four members of their family. They are a local Spanish-speaking family that came in for the first time. They had a total of 5 prescriptions and neither of them spoke English very well. When I started to counsel them on their medications I only got blank stares in return. I asked Maria if she spoke English and she shook her head. So I ran over and got Rose, a pharmacist fluent in Spanish. As soon as Rose started talking their faces lit up! She was able to counsel them on all of their medications! RJ was most concerned about his sleep. He said he was getting up all night to use the restroom and couldn't figure out why. After asking a couple of questions, Rose figured out he was taking his blood pressure medication, hydrochlorothiazide, at night with his cholesterol medication. Rose was able to teach him that his blood pressure medication is a water pill and should be taken in the morning to avoid getting up at night to go to the restroom. She ended up talking to them for almost twenty minutes answering questions and getting to know them. They left knowing much more about their medications than they did previously! And they also felt like they had a resource in case they thought of more questions.

Pharmacist Intervention: Combining her clinical knowledge and knowledge of Spanish, Rose was able to figure out that RJ was taking his medication at the wrong time of day. Switching to taking his medication in the morning stopped him from having to get up all night to use the restroom

Outcome: RJ switched to taking his blood pressure medication every morning. He told us that he doesn't have to get up at night to use the restroom anymore and feels much more rested. He is still taking his medication and his blood pressure is controlled! This small change will have a huge impact on RJ's quality of life.

"Without the pharmacist I would've stopped taking my medication. Before we came here I didn't understand how my medications worked or helped me. Now I know that there is someone I can ask if I have another question!" –RJ

District 11

Site: The Pharmacy Counter
2655 West Central Avenue, Toledo, Ohio 43606

Story: I regularly sit down with patients to do comprehensive medication reviews. My patient, James, is on many medications to help treat his depression and Parkinson's disease, so he frequently sits down to have medication reviews with me. During a recent review, I noticed that he had two new medications since I had seen him last, Seroquel® and Azilect®. James told me that he started the Seroquel® first for his depression and then the Azilect® had been added afterward because his tremors were getting worse. I told James that Seroquel® can cause tremors in patients. It seemed that maybe the Seroquel® was making his tremors worse and the Azilect® was added to treat this side effect. I contacted his physician to discuss James' side effects and recommend a different therapy for his depression.

Pharmacist Intervention: Because of my pharmacy training and clinical experience with Parkinson's patients, I realized that Seroquel® could be making James' tremors worse. There are many other medications that can be used to help treat his depression so I recommended trying another therapy to his physician in an effort to decrease the side effect he was having.

Outcome: Not only did the physician agree that James' Seroquel® should be discontinued, we were able to discuss stopping the Azilect® a few days later also. Once the Seroquel® was stopped, James' tremors improved and the physician no longer felt that the Azilect® was necessary! This has saved James from having to purchase and remember to take additional medications and has also had an impact on his quality of life!

District 12

Site: Gene Wright Community Health Center
441 East 8th Street, Lima, Ohio 45804

Story: One of my favorite patients, James, came into our outpatient diabetes clinic today with a new prescription for a diabetes medication called Invokana®. He's a 62-year-old Hispanic male and has a history of chronic kidney disease, so I wanted to check the dosing of his new medication to make sure it would not cause more damage to his kidneys. Based on my previous clinical experience and his current lab values, I recognized that this medication was not a good choice for James because of his decreased kidney function. I contacted his primary care provider and recommended it be changed to a different medication that can be used in patients with poor kidney function. The primary care provider was so happy I caught this issue and agreed to make the change!

Pharmacist Intervention: The patient could experience increased side effects from the medication building up in his body or his kidney function could have declined further if he had continued the new medication.

Outcome: The primary care provider changed the medication to one that can be used in patients with poor kidney function and the medication was less expensive for the patient!

“I find it helpful for a local pharmacist to closely review the medications that a patient is taking. Pharmacists at The Pharmacy Counter frequently contact me if they see a patient isn't filling their medication regularly and together we can reinforce how important it is to take medications correctly and safely.” – Dr. Walter Stotz, Toledo, Ohio



“Without the pharmacist, this patient could have continued therapy for months, potentially leading to dangerous side effects and further decline in kidney function.” – Primary Care Physician

District 13

Site: Marc's Pharmacy
170 Sheffield Center, Lorain, Ohio 44055

Story: One day last week, Juanita, a Hispanic woman in her 60s, came into the pharmacy with a confused look on her face. She set her new diabetes testing kit on the counter and began to speak rapidly in Spanish. I could tell she was upset. Thankfully, I also speak Spanish and I was able to talk to her and calm her down a little bit. She said that she was just diagnosed with type-2 diabetes and asthma and was very overwhelmed. She told me that she was prescribed a medication for her diabetes, a blood sugar testing kit, and an inhaler for her asthma. She wasn't sure how to use her testing kit or inhaler and didn't understand how she should take her new diabetes medication. I took the time to talk with her about what diabetes is, how her medication will help her and how to use her testing kit. I also talked with her about asthma and how her new inhaler will work to help with her shortness of breath. Afterward, I showed her how to use her inhaler and had her practice before she left the pharmacy. Altogether I talked with Juanita for about 30 minutes, and it was the best 30 minutes of my day! When we were done talking, Juanita had a smile on her face and gave me a big hug.

Pharmacist Intervention: As a medication expert, I could teach Juanita about her new medications and blood sugar testing kit immediately. I took the time to make sure she understood the new diseases she had been diagnosed with and also understood that taking her medications would help her feel better.

Outcome: Because Juanita understands her medications better, she is more likely to continue to take them properly. If she keeps her blood sugar and asthma under control, she will have a better quality of life and will likely have fewer trips to the hospital.

“Thank you for taking the time to talk to me! I was so confused and upset about being diagnosed with diabetes. I will take my medicine now because I know it will help me!” – Juanita



“I realized that you have always been supporting me and helping me learning what I need to do to control my diabetes. Now it is time for me to take what you have taught me and put it into action. And I know that if I fall short, you will be there to catch me!” – Hannah

District 14

Site: Kroger Pharmacy
262 West Main Street, Amelia, Ohio 45102

Story: During an appointment with Hannah, one of my regular diabetes patients, she handed me a CD. I have been helping her with diabetes coaching for two years and she has never brought a CD to an appointment! She told me that she had started taking pictures of every one of her meals and had put the pictures on the CD to show me. She told me that previously she hadn't really been interested in managing her diabetes, but that she changed her mind recently. She really wanted to get her blood sugars down. She told me that it was time for her to take action and use all the information I had been teaching her for the last two years. I was blown away! She was so motivated! She told me about how she had been reducing her portions of starchy and sweet foods; how she had increased the vegetables she ate with every meal. She also told me that she was increasing her exercise. Her new target was 30 minutes every day of the week! She had a weight loss goal and everything! I was so impressed. I thought I would never get through to her, but by being persistent and always encouraging her she decided to make some major changes. She even suggested that we write a book together because she wants to spread the word on how pharmacists can change patients' lives.

Pharmacist Intervention: By working in a community pharmacy, patients have access to my expertise whenever they need it. Being persistent and continuing to encourage Hannah has really paid off! I shared my knowledge of diabetes with her and she is ready to make some huge changes that will improve her quality of life!

Outcome: Hannah emails me weekly between coaching appointments to let me know how she's doing. She frequently asks questions about her diabetes and I help guide her. Her A1c has dropped from 8.3% to 7.4% in the few short months since she got really motivated to make a change and will likely have fewer trips to the hospital.

District 15

Site: Kroger Pharmacy
2000 East Main Street, Columbus, Ohio 43205

Story: On Sunday one of our regular patients, Jamie, came in just as we were closing the pharmacy. She is a 19-year-old woman who has been filling at our pharmacy for a couple of years. I was really worried when I walked out to talk to her and saw her crying. She told me she was seriously thinking about attempting suicide. I tried to calm her down and assured her that I would get her some help. My mind was racing and I remembered that she had filled a new prescription for an antidepressant medication, sertraline, a couple of weeks earlier. Even though the pharmacy was closed, I sat with her in the waiting area while I called a mental health crisis hotline. The mental health specialist I talked to arranged for a cab to pick Jamie up at the pharmacy to take her to the hospital. She was so upset I just couldn't leave her by herself, so I sat with her in the waiting area until the cab came. I asked her if I could call her family and she gave me permission to contact her mother to let her know what was going on. And the next morning I called her doctor to recommend the patient discontinue the medication. Today Jamie and her mother, Kathy, came in to the pharmacy to say hello. Jamie looked like she was doing much better and her mother was so appreciative of my help!

Pharmacist Intervention: I realized that her new antidepressant medication could be causing suicidal thoughts. Left unnoticed, these negative thoughts caused by the medication may have continued and she may even have actually attempted to commit suicide.

Outcome: Jamie's doctor agreed that she should stop taking the antidepressant medication. Once off the medication, her suicidal thoughts stopped completely. I made sure to record the reaction to the sertraline in our software so we would make sure to not dispense this medication, or one like it, to her again!

“Thank you for everything you have done for my daughter. You saved my daughter's life.”
– Kathy (Jamie's mom)

District 16

Site: HospiScript
555 Metroplace North, Dublin, Ohio 43017

Story: Today one of our certified hospice nurses, Jane, called me from a patient's home and asked a question about changing the patient's dose of pain medication, methadone. The patient, Rob, is in hospice for end-of-life care because he has stage 4 lung cancer. He is no longer receiving any life-saving treatment for his cancer, but as part of his hospice care we want to make sure he is as comfortable as possible and has the best quality of life he can. Because Rob is so sick he is on many medications and Jane was worried about medication

“I was very frustrated that the patient's pain was not controlled. Now he is more comfortable and I know I helped him. I really appreciate all the help I get from pharmacists at HospiScript!”

changes because there could be a drug-drug interaction. Jane told me that Rob's pulse was increased and he was breathing faster than normal. Based on the symptoms Jane described to me, it sounded like Rob's pain was not well controlled. We discussed the options that we had to help control his pain and I recommended that we increase the dose of methadone. Jane and I talked about how this might impact the patient's overall care and also discussed if we thought the increase of methadone dose would actually help the patient.

Pharmacist Intervention: I recommended that we increase Rob's methadone dose to help control his pain. I made sure that it wouldn't interact with any other medications or cause any serious side effects for him.

Outcome: Jane accepted the recommendation to increase Rob's methadone dose. The patient's pain was better controlled and his quality of life was improved.



District 17

Site: Holzer Family Pharmacy
100 Jackson Pike, Gallipolis, Ohio 45631

Story: At work today I met a new patient named Joni. She is a 62-year-old woman who just started using an insulin called Lantus to control her type 2 diabetes. She came in because she was really frustrated that her blood sugar numbers hadn't gone down at all since she started using her insulin a week ago. It was such a big step for her to agree to use insulin and now she felt like it wasn't helping at all! We talked a lot about how useful insulin is to help control blood sugars and she seemed to be feeling better. Right before she left I asked her to show me how she was injecting her medication. She took out her pen and pressed the stopper against her belly to show me how she uses it. Right away I noticed at the stopper was bulging and that she didn't have a needle on the pen. She was using the right technique to inject her insulin, but she wasn't using a needle! It turns out that she had never been prescribed needles for her pen, so all of the insulin she thought she had been giving herself was collecting in the stopper of the pen! I called her doctor's office right away to get a prescription for pen needles and showed her how to use them.

Pharmacist Intervention: Without needles, the patient was not able to actually administer her insulin to help reduce her blood sugars. Not only was her diabetes not being helped, but the patient was very frustrated and wanted to stop using the medication because she did not feel it was helping.

"I can't believe I didn't know that I needed a needle! I thought all I had to do was turn the dial on the pen!" – Joni

Outcome: I filled the prescription for pen needles from Joni's doctor and showed her how to use them. She is much more hopeful that the insulin will help her and is excited to see her number come down now that she is using her insulin correctly!

District 18

Site: Giant Eagle Pharmacy
909 East Main Street, Ravenna, Ohio 44266

Story: Sue is a 62-year-old woman who came into the pharmacy this evening for some refills. She mentioned that since she started her new antidepressant medication, trazodone, she was so tired she could barely make it through the day without a nap. I asked her if I could do a comprehensive medication review with her. She gave me her medication list - there were 13 medications on her list and she was worried about taking so many at the same time. Sue told me that she has to use multiple pharmacies to get her medications at the cheapest prices. She sees an endocrinologist for her diabetes, a primary care doctor for her high blood pressure and a psychiatrist for her depression. While I was reviewing her medications with her, I noticed that she had three different medications listed that could make her tired! When I asked her some additional questions about these medications, she told me that her trazodone was prescribed by her psychiatrist to help her sleep at night and might also help with her depression; Ambien® was prescribed by her primary care doctor; and her neighbor recommended that she try taking Bendaryl® at night when she couldn't sleep. She said she takes all three medications every night! No wonder she is so exhausted! We talked about how all of these medications can make her tired. I recommended that she stop using Bendaryl® to help her sleep at night. I also contacted her psychiatrist and her primary care doctor to update them on all the medications she was taking and to discuss the increased tiredness she was feeling. Sue left the pharmacy a totally different person! She felt so much better having a plan to help make her less tired!

Pharmacist Intervention: The patient's quality of life was definitely impacted by taking these medications together. Using my clinical knowledge of the potential side effects of these medications, I was able to work with her doctors to make changes to her regimen that will result in less fatigue and increased quality of life for Sue.

Outcome: The patient's quality of life was definitely impacted by taking these medications together. Using my clinical knowledge of the potential side effects of these medications, I was able to work with her doctors to make changes to her regimen that will result in less fatigue and increased quality of life for Sue.

"I had no idea that all these drugs did the same thing! I'm not going to try anything new unless I talk with you first." – Sue



District 19

Site: The Ohio State University Wexner Medical Center Martha Morehouse Internal Medicine Clinic
2050 Kenny Road, Columbus, Ohio 43221

Story: Today Rick, an 86-year-old patient, came to clinic with his medications. He was on 19 total! He really wanted to review why he was on everything because he felt like he was taking too many medications. After reviewing all of his medications I had a lot of recommendations for his doctor. Two medications were started a long time ago and the issue he had going on at the time was resolved, so he no longer needed to take them. He was on a blood pressure medication, lisinopril, but his blood pressure was still high. Also, he was taking two cholesterol medications, simvastatin and atorvastatin, which are in the same class and shouldn't be taken together. He was also taking a medication called clonazepam to help him sleep. This medication should be used with caution in elderly patients because it can increase their risk of falls. He was also on a very expensive medication for his diabetes, Invokana®, that he could not afford. Thankfully, the patient's doctor was in his office right down the hall from me. I talked with Rick's doctor about the medication issues I identified. He agreed to change the medications that were being used for no reason, increased Rick's blood pressure medication to help control his blood pressure, discontinued the prescriptions for simvastatin and clonazepam, and switched his diabetes medication to a less expensive option.

Pharmacist Intervention: Understanding the way drugs work and how they can safely be used in the elderly really helped me pinpoint medication changes that would help Rick.

“Thank you for your assistance with this patient case. This is an example of the incredible value we get from having clinical pharmacists in the office.”
– Dr. Neeraj Tayal (Rick's physician)

Outcome: Rick's physician accepted all of my recommendations! We were able to eliminate four medications, reduce his total medication cost and avoid harmful side effects that could have occurred if he had continued taking duplicate cholesterol treatments and clonazepam. Rick was very happy to be on fewer medications also!

District 21

Site: The Centers for Families and Children
4400 Euclid Avenue, Cleveland, Ohio 44103

Story: I had an interesting case this week. Taylor is a 34-year-old Caucasian female who is HIV-positive. Her primary care physician changed one of her HIV medications in order to try to help control the HIV virus better. Unfortunately, Taylor's insurance wouldn't cover the medication immediately. Taylor didn't understand why the insurance wouldn't cover the medication and she ended up going a couple of days without any medication because of it! I worked with her insurance to get the medication filled and packaged it with the rest of her meds. When I delivered the medication to her home, I talked to Taylor a lot about how important it is to take her HIV medication every day. We talked about how HIV can become resistant to medications if they aren't taken regularly. She agreed to take the medication regularly. She stated that she didn't know that HIV could become resistant. I called her again a few days later to see if she had any questions. She told me she was doing great and didn't have any concerns!

“I really appreciate you taking the time to help me understand. I always worry about getting sick, but now I feel like I know how to manage my HIV better so I can keep from getting sick.” – Taylor

Pharmacist Intervention: Not only was I able to get Taylor's medication filled earlier, but I educated her on how important it is to take her medication properly.

Outcome: The patient has been taking her medication properly since I visited her in her home. This will help reduce the chance that the HIV will become resistant to the medications and help keep her healthy!

District 22

Site: Discount Drug Mart
661 Wooster Street, Lodi, Ohio 44254

Story: Last week a physician assistant from a local clinic called the pharmacy. The physician assistant let me know that a mutual patient, Ruthie, was being treated for a stomach ulcer. The issue was that one of Ruthie's antibiotics needed to treat the stomach ulcer has a drug-drug interaction with her blood pressure medication, diltiazem. I was able to recommend a different antibiotic treatment that would not interact with her blood pressure medication. The office sent over prescriptions for Ruthie's ulcer treatment right away. While I was checking the prescriptions, I noticed that one of the medications was not dosed correctly and would not treat her stomach ulcer properly. I immediately called the physician assistant back to let her know about the dosing issue I found. Within a few minutes I had a new prescription electronically sent from the clinic for the medication, but this time it had the correct dosing on it. I really felt like I helped the patient a lot! I know that her medications are all correct and her stomach ulcer will get taken care of!

"I am sure glad you know what you're doing! Otherwise, I would be in trouble. I appreciate all of your help." – Ruthie

Pharmacist Intervention: I was happy that I could recommend a new antibiotic to treat Ruthie's ulcer. I also helped adjust the dosing of the recommended antibiotic so that it would properly treat her condition.

Outcome: Ruthie's ulcer was successfully treated and she had no adverse effects from her medications. I was also able to build a relationship with a physician assistant at a local clinic.



District 23

Site: The Centers for Family and Children
5955 Ridge Road, Parma, Ohio 44129

Story: A while ago I talked to a new patient, Seth. He has severe asthma and was recently prescribed Advair® and Proair® inhalers daily to help control his symptoms. Unfortunately, he said that he was still very short of breath and wheezing. He actually said he didn't feel like he had any improvement since starting his inhalers. That worried me because the combination of Advair® and Proair® should definitely have helped his symptoms! He said he was using one puff of Advair® twice daily, as prescribed, and using the Proair® five times on most days. Then I asked him how he was using the inhalers. He told me that they were both "basically the same" and that he knew how to use them. This made me think that maybe he was using them incorrectly because it's a little bit confusing to use them since they are very different! Advair® actually has a powder inside that you inhale and Proair® is gas that you breath in. I walked him through the process of using the Proair® inhaler first and he stated that he was using it exactly as I described. Next, we walked through the process of using the Advair® inhaler. It turns out that he didn't understand how to use it at all! I talked with him for another 15 minutes until he understood exactly how it should be used.

Pharmacist Intervention: Educating the patient on how to properly use his inhalers will ensure that he is actually getting the benefit of the medication. Knowing that each of his inhalers is different and being able to use each properly is key to his asthma being controlled.

Outcome: When I called Seth a week later he said that his symptoms were already much better controlled. He said that he had much less wheezing and wasn't short of breath walking out to his car as often. Because his asthma is better controlled his quality of life is much improved and he is much less likely to have to go to the hospital for treatment of an asthma attack.

"I have so much more energy now! I can't believe I was using my inhaler wrong. I'm grateful that you took the time to teach me how to use it!" – Seth

“Thank you, so much! I wish I would’ve asked about the change in my prescription two months ago!” – John



District 25

Site: Discount Drug Mart
6148 Dunham Road, Maple Heights, Ohio 44137

Story: John is a 72-year-old male patient who has been using our pharmacy for years. He stopped in last week to get a refill of his asthma inhaler, Symbicort®. While I was talking to him about his inhaler I noticed that he didn’t seem as energetic as normal. I asked him if he was feeling okay. He told me that he was feeling really tired and having difficulty getting things done. He said he felt winded a lot but wasn’t sure why. I noticed in his medication history that his old prescription was written to use the Symbicort® twice daily, but his most recent prescription that had been written two months ago instructed John to use his Symbicort® once daily. I asked him to confirm how he was using the inhaler and he told me that he had been using it only once daily for the last two months. I asked John to wait for a minute while I called his doctor. After I discussed the issue with his doctor, he realized that the prescription should be changed to using Symbicort® twice daily. I was able to update John’s prescription in the computer and talk with him about changing back to using his inhaler twice daily before he even left the store.

Pharmacist Intervention: Although it didn’t seem like a big difference, the change in dose from twice daily to once daily had really affected John’s quality of life. I was happy that I knew that this medication is usually used twice daily.

Outcome: John stopped in the pharmacy again today to let me know that he is feeling much better. He said he has been using his inhaler twice daily again and is much less winded.

District 26

Site: Marion General Hospital
1000 McKinley Park Boulevard, Marion, Ohio 43302

Story: I had a great catch today! A patient, Kyle, had an order for a pain medication, morphine. He had been using this medication at home because of his chronic pain. The order was written to use a 20 milligram-per-milliliter strength and to give the patient 5 milliliters of medication every 2 hours as needed for pain. While I was looking I thought something had to be wrong. If I gave it to the patient as it was written, he would have gotten 100 milligrams of morphine! I asked Kyle if he knew what the correct dose was but he was not feeling well and didn’t remember. I tried to contact the doctor to confirm the dose but I couldn’t get a hold of him right away. When he called back he told me that the order should have been written to take 5 milligrams of the medication – not 5 milliliters! This seemingly small difference was a 20-fold difference in the amount of medication the patient would get! I was so happy I trusted my gut and checked the order before sending the medication to the patient’s room.

Pharmacist Intervention: We use morphine in the hospital all the time and giving a patient 100 milligrams of morphine is a lot! I knew to check that dose before giving the medication.

Outcome: Thankfully the patient didn’t receive the wrong dose of medication. He could have been seriously hurt, if not killed, by getting 20 times the dose he was supposed to get.

“We are so fortunate to have clinical pharmacists checking the medications before they are sent to the rooms. This was a close call. The patient luckily wasn’t harmed.” – Kyle’s doctor

District 27

Site: Acme Pharmacy
4302 Allen Road, Stow, Ohio 44224

Story: Today I saw Vickie. She's a 45-year-old African American woman who has been using our pharmacy for two years. She came in to pick up a refill of her blood pressure medication, losartan. While she was at the pharmacy she mentioned that she has a hard time remembering to take her medications. She was on a second blood pressure medication, metoprolol tartrate, that she was supposed to take twice daily. We talked about using a pillbox to help remind her to take her medications. Vickie told me that she had tried using a pillbox before and it hadn't helped. I had a great idea! I helped her set alarms on her smart phone to help remind her to take her medicines. Vickie always has her phone in her purse so I think it will really help her take her medication when she is supposed to.

Pharmacist Intervention: I know how important adherence to medication is. I have brainstormed many ways to help patients remember to take their medications. Using alarms on a smart phone is a great way to help patients remember.

Outcome: Vickie will be more adherent to her medications now. Her blood pressure will be better controlled and she is less likely to have complications like kidney damage.

"Thank you for helping me understand my medications. I feel so much more comfortable taking them now!" – Vickie



District 28

Site: Akron General Medical Center
400 Wabash Avenue, Akron, Ohio 44307

Story: Recently we had a patient named Arnold come into the hospital because he was having a heart attack. He is a 40-year-old Caucasian man who hadn't been to the doctor in 10 years. He was treated and had a stent placed in the artery that was blocked. He was treated for his heart attack and after a couple of days he was ready to go home. He came into the hospital on no medications but left on five medications! He was prescribed atorvastatin to help his cholesterol, lisinopril and metoprolol to help his blood pressure, Plavix® to help prevent blood clots and nitroglycerin for chest pain. Arnold wasn't sure how to take all of these new medications. He wasn't even sure that he would be able to remember to take them! Luckily, our hospital has a concierge medication service that fills a month of medications and delivers them to the patient on the day the patient is being discharged so at least they don't have to worry about getting to the pharmacy after they leave the hospital. When I delivered Arnold's new medications to him I counseled him on each one and made sure he understood why he was taking them. We talked about how taking his medications could help prevent him from having another heart attack. He seemed really grateful to have someone talk to him about these new medications.

Pharmacist Intervention: I was able to teach Arnold how each of his medications worked to control his blood pressure and help prevent him from having another heart attack. Understanding how each one worked motivated Arnold to take his medications regularly.

Outcome: Arnold is at much lower risk of having another heart attack because he is taking his medications. He also has an improved quality of life and is able to go back to work after his heart attack.

"You rock! I would have been lost without your help!" – Arnold

District 29

Site: Marc's Pharmacy
1664 North Main Street, North Canton, Ohio 44720

Story: Tony came back to the pharmacy today with his 88-year-old mother, Jan. Last month Tony had been really concerned because his mom seemed to be more disoriented and forgetful than normal in the mornings. He was so worried he was going to take her to the doctor. Before going to the doctor Tony brought Jan to the pharmacy so I could check her medication list to see if any of them could be causing the issue. I noticed that she had been recently prescribed Ambien® to help her sleep at night. She had been prescribed a high dose of the medication to take each night at bedtime. I mentioned that this medication could be causing Jan to feel more sleepy and confused in the morning. I let Tony and Jan know that there are other medications that can help with sleep. After they left the pharmacy, I called Jan's doctor and let him know how Jan was feeling. I recommended changing Jan from Ambien® to trazodone, another sleep medication that is less likely to cause confusion. He agreed with the change and gave me a verbal prescription on the phone. I filled the prescription and Jan switched to trazodone that night!

Pharmacist Intervention: My clinical training and experience at the pharmacy have taught me that some medications are safer than others in an elderly patient. Jan was having a negative reaction to her sleep medication and because of her advanced age neither she nor her son were sure what was causing the confusion. I was happy to be able to recommend an alternative and help Jan to feel better!

Outcome: Jan's doctor accepted my recommendation to change medications. Jan has been on the trazodone for a month now and no longer feels confused or disoriented, but is still getting the help she needs to sleep at night.

"I really appreciate the pharmacist's knowledge of my medications. He took the extra time to make sure the medications that I am taking are all safe and working well for me." – Jan

District 31

Site: Kroger Pharmacy
350 East Broad Street, Pataskala, Ohio 43062

Story: Today I had a comprehensive medication review with Christine. She takes medications for high blood pressure, diabetes and asthma. She is using two inhalers for her asthma: a Proventil® inhaler to use as needed for rescue and a Symbicort® inhaler to use every day as maintenance to help treat her asthma. While I was reviewing her medications with her, I asked her how often she uses her rescue inhaler. She told me that she was using it about once a week. Then, I asked her to show me how she was using it. She pulled out her Symbicort® inhaler and started to take a puff! She was

"Thank you! I'm going to put my yellow inhaler in my purse so I have it whenever I need it and keep my red inhaler at home so I don't confuse them again!" – Christine

confusing which inhaler was her rescue inhaler and which one was supposed to be used every day. The medication she was supposed to be taking once a day was only being used once a week! And the medication she was supposed to be using once a week was being used every day! I talked with her about the differences between the two inhalers. I showed her that her rescue inhaler has a yellow case and that her maintenance inhaler is in a red case. She asked me about how the medication in the inhalers worked differently to help her asthma. When she left the pharmacy she was using her inhalers correctly for the first time since they had been prescribed! I was so happy to be able to teach her about her medications!

Pharmacist Intervention: Inhalers for asthma can be confusing! There are many different types of inhalers and each comes in a different colored case. I can see how patients could be confused! Seeing all of the inhalers on a daily basis makes it easy for me to recognize which inhaler is which. Also, because of my training as a pharmacist I understand how each of the medications works to help a patient's asthma. I was able to share my knowledge with the patient to help her understand as well!

Outcome: Now that Christine is using both of her inhalers correctly, her asthma will be much better controlled. Her quality of life will be improved because she will be able to breathe more easily and not feel winded.

District 32

Site: Discount Drug Mart
3032 North Ridge Road East, Ashtabula, Ohio 44004

Story: Lauren came to the pharmacy today because her blood glucose meter seemed to be acting up. She is a type 2 diabetic and has been coming to our pharmacy for over 10 years, so we were the first people she thought of who might be able to help out with her meter. I took her to our private counseling room and had her show me how she tests. She went through the entire process of pricking her finger, using a test strip and applying the blood from her finger to the test strip. She did everything perfectly! Her meter then said that her blood sugar was 58. That was the strange part. Lauren said she had just eaten breakfast and was feeling fine so that blood sugar reading seemed to be way too low. I looked at her test strips and saw that they had expired over a year ago! She must have grabbed an old box of strips when her previous box ran out. I got her a new box and we tested her sugar again. This time it read 170. That number seemed much closer to what it should be for Lauren. I talked with her about going through any other supplies she had at home to get rid of everything that was expired. We solved the mystery!

Pharmacist Intervention: I know how important it is that you avoid using expired test equipment for diabetic testing. It's just like medication – if it's expired, it won't work like it's supposed to!

Outcome: Lauren can be confident that her blood sugar numbers are correct again. She also understands how important it is that she check her testing supplies to make sure they aren't expired. She will now be able to control her diabetes much better!

"I knew something was wrong! I just didn't know what it was! I'm so lucky to have a great pharmacist that's willing to help me when I need it!" – Lauren



District 33

Site: Giant Eagle Pharmacy
1201 Doral Drive, Youngstown, Ohio 44514

Story: When Bethany came into the store today, I could tell something was wrong. She has only been filling her prescriptions with us for about six months, but she is usually really chipper and upbeat. Today, she was having trouble walking and wasn't her usual happy self. Because I fill her medications every month I know that Bethany is a type 2 diabetic and has a lot of complications. She had told me previously that she has had amputations because of poor circulation in her feet caused by her diabetes. When I asked her what was wrong she told me that she had a bad sore on her foot and it was making it hard for her to walk. She said that she had been watching the sore for a number of days and that it seemed to be getting bigger instead of healing. I know that foot sores in diabetic patients can be difficult because they are slow to heal and can become infected. I could see that Bethany was concerned about it too. I asked her if she had seen a doctor about it and she told me that she didn't want to "bother anyone" with it and that she could take care of it on her own. I recommended that she call her doctor and let him know what was going on. I even gave her the pharmacy phone to make the call! When she talked to the doctor he suggested she come in the next day to have it checked out. Bethany seemed much happier when she was leaving the pharmacy than when she came in!

Pharmacist Intervention: Because Bethany already had complications from her diabetes, I was worried about the sore on her foot. I know that they can become easily infected and frequently require antibiotic treatment. I appreciate that Bethany wanted to try to take care of it on her own, but this was definitely a case where she should see a doctor! I was happy to be the point of contact to encourage her to make an appointment!

"I feel so much better! Since I started taking the antibiotics and got new shoes I can actually walk again! Thank you so much!"

Outcome: Bethany saw her doctor the next day and was prescribed antibiotics for her foot. He also helped her select different socks and shoes to help reduce the chance of another sore happening. She is already feeling much better and knows to watch out for foot sores in the future!!

Glossary

Adverse events: injuries resulting from drug-related medical events

Counseling: providing a patient with appropriate, relevant and understandable information about his/her medication

Comprehensive medication review (CMR): systematic process of collecting patient-specific information, developing a list of drug-related problems, and creating a plan to resolve these problems with the patient or caregiver

Drug utilization review: a continuous review of prescribing, dispensing and use of medications

Diabetes education: information offered to patients by healthcare providers to help patients better understand diabetes, the medications that treat it, the tests used to track it and the complications that can occur if not appropriately treated; frequently this information is given by pharmacists

Immunizations: a process making a patient immune to an infectious disease

Medication reconciliation: the process of creating an accurate list of medications a patient is taking and comparing that list to a physician or hospital list to correct any errors

Medication recommendation: a proposal for best course of action for medication use

Medication synchronization: the process of aligning all of a patient's medications to be filled on the same day of the month usually resulting in a reduced number of trips to the pharmacy each month and increased compliance

Medication therapy management (MTM): reviewing a patient's medications to optimize drug therapy and improve health outcomes

Smoking cessation program: service offered in community and ambulatory care settings during which a patient (or patients) meet with a healthcare provider regularly to stop smoking; frequently led by pharmacists

Transition of care coordination: continuity of care provided when a patient transitions from one healthcare setting to another, for example hospital discharge

Warfarin: blood-thinner medication commonly used in patients to prevent heart attacks, strokes and other blood clots

Warfarin clinic: service offered in ambulatory care settings to check effectiveness and safety of Coumadin® (warfarin) treatment for patients; this service is frequently led by pharmacists

Acknowledgements

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Acme Pharmacy

4302 Allen Road, Stow, OH 44224

Ada Area Family Practice

520 West Lincoln Avenue, Ada, OH 45810

Akron General Medical Center

400 Wabash Avenue, Akron, OH 44307

Akron General Medical Center

1 Akron General Avenue, Akron, OH 44307

AxessPointe Community Health Center, Inc.

1400 South Arlington Street, Suite # 38,
Akron, OH 44306

Bryan Community Health Center Pharmacy

200 Van Gundy Drive, Bryan, OH 43506

Cann Clinic-Cincinnati Health Department

5818 Madison Road, Cincinnati, OH 45227

Center for Coordinated Care

1221 Hayes Avenue, Sandusky, OH 44870

Charitable Pharmacy of Central Ohio

200 East Livingston Avenue, Columbus, OH 43251

**Charitable Pharmacy of Central Ohio at
Lower Lights Christian Health Center**

1160 West Broad Street, Columbus, OH 43222

Clinical Rx Consulting

Kent, OH 44240

Columbus Neighborhood Health Center, Inc.

2300 West Broad Street, Columbus, OH 43204

CVS Pharmacy

2532 East Main Street, Columbus, OH 43209

Dayton VA

4100 West 3rd Street, Dayton, OH 45428

Discount Drug Mart

1673 Pearl Road, Brunswick, OH 44212

Discount Drug Mart

6148 Dunham Road, Maple Heights, OH 44137

Discount Drug Mart

3032 North Ridge Road East, Ashtabula, OH 44004

Discount Drug Mart

661 Wooster Street, Lodi, OH 44254

Discount Drug Mart

1062 West McPherson Highway, Clyde, OH 43410

Gene Wright Community Health Center

441 East 8th Street, Lima, OH 45804

Giant Eagle Pharmacy

1201 Doral Drive, Youngstown, OH 44514

Giant Eagle Pharmacy

909 East Main Street, Ravenna, OH 44266

Hart Pharmacy

4861 Glenway Avenue, Cincinnati, OH 45238

Holzer Family Pharmacy

100 Jackson Pike, Gallipolis, OH 45631

Hospiscript, a Catamaran Company, Clinical Services

555 Metro Place North, Suite 325, Dublin, OH 43017

Kenton Community Health Center

111 West Espy Street, Kenton, OH 43326

Kmart Pharmacy

2100 Niles-Cortland Road, Warren, Ohio 44484

Kmart Pharmacy

7700 Brookpark Road, Cleveland, OH 44129

Kroger Pharmacy

262 West Main Street, Amelia, OH 45102

Kroger Pharmacy

7685 Mall Road, Florence, KY 41042

Kroger Pharmacy

2257 North Holland Sylvania Avenue, Toledo, OH 43614

Kroger Pharmacy

3637 South High Street, Columbus, OH 43207

Kroger Pharmacy

4485 Refugee Road, Columbus, OH 43232

Kroger Pharmacy

2525 Hilliard Rome Road, Hilliard, OH 43026

Kroger Pharmacy

2000 East Main Street, Columbus, OH 43205

Kroger Pharmacy

850 South Hamilton Road, Whitehall, OH 43213

Kroger Pharmacy

350 East Broad Street, Pataskala, OH 43062

Kroger Pharmacy #920

55 West Schrock Road, Westerville, OH 43081

Kroger Pharmacy

7545 Sylvania Avenue, Sylvania, OH 43560

Kroger Pharmacy

1510 Covington Avenue, Dayton, OH 45240

Kroger Pharmacy

4777 Kenard Avenue, Cincinnati, OH 45232

Kroger Pharmacy

2100 Beechmont Avenue, Cincinnati, OH 45230

Kroger Pharmacy

7132 North Hamilton Road, Cincinnati, OH 45231

Kroger Pharmacy

4500 Montgomery Road, Cincinnati, OH 45212

Kroger Pharmacy

3609 Warsaw Avenue, Cincinnati, OH 45205

Kroger Pharmacy

6962 East Main Street, Reynoldsburg, OH 43068

Kroger Pharmacy

5800 West Broad Street, Galloway, OH 43119

Kroger Pharmacy

9101 Ohio River Road, Wheelersburg, OH 45694

Kroger Pharmacy

6417 Columbus Pike, Lewis Center, OH 43035

Kroger Pharmacy

7100 Hospital Drive, Dublin, OH 43017

Kroger Pharmacy

548 Clinton Avenue, Washington Court House, OH 43160

Kroger Pharmacy

6011 Groveport Road, Groveport, OH 43125

Kroger Pharmacy

3353 Cleveland Avenue, Columbus, OH 43224

Kroger Pharmacy Store

1375 Chambers Road, Columbus, OH 43212

Marc's Pharmacy

170 Sheffield Center, OH 44055

Marc's Pharmacy

1664 North Main Street, North Canton, OH 44720

Marion General Hospital

1000 McKinley Park Boulevard, Marion, OH 43302

Nationwide Children's Hospital Outpatient Pharmacy

700 Children's Drive, Columbus, OH 43205

New Carlisle Community Health Center Pharmacy

106 North Main Street, New Carlisle, OH 45344

ProMedica Pharmacy Counter

2100 West Central Avenue, Toledo OH 43606

Ritzman Pharmacy Corporate Office
8614 Hartman Road, Wadsworth, OH 44281

Sand Run Pharmacy
40 Sand Run Road, Akron, OH 44013

Southeast, Inc. Mental Health Services
16 West Long Street, Columbus, OH 43215

The Centers for Families and Children
5955 Ridge Road, Parma, OH 44129

**The Centers For Families and
Children Pharmacy #1**
4400 Euclid Avenue, Cleveland, OH 44103

The Centers for Families and Children
3929 Rocky River Drive, Cleveland, OH 44111

**The Ohio State University Wexner Medical Center
General Internal Medicine at Care Point East**
543 Taylor Avenue, Suite 3176, Columbus, OH 43203

**The Ohio State University Wexner Medical Center
General Internal Medicine at Martha Morehouse**
2050 Kenny Road, Columbus, OH 43221

**The Ohio State University Wexner Medical Center
General Internal Medicine at Stoneridge**
3900 Stoneridge Lane, Suite B, Dublin, OH 43017

**The Ohio State University Wexner Medical Center
Medication Management Program**
100 Parks Hall, 500 West 12th Avenue,
Columbus, OH 43210

**The Ohio State University Wexner Medical Center
University Health Services**
201 McCampbell Hall, 1581 Dodd Drive,
Columbus, OH 43201

The Pharmacy Counter
2655 West Central Avenue, Toledo, OH 43606

Uptown Pharmacy
23 North State Street, Westerville, OH 43081

Victor J. Cassano Health Center
165 South Edwin C. Moses Boulevard,
Dayton, OH 45402

Walmart Pharmacy
85 River Trace Lane, Chillicothe, OH 45601

Walmart Pharmacy
1501 Wagner Avenue, Greenville, OH 45331

Whitehall Family Health Center
882 South Hamilton Road, Columbus, OH 43213

