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COMMUNITY PHARMACY NEWS

EVERYTHING PHARMACISTS NEED TO KNOW

XII EDITION: September 2020

UPDATE IN THE HYPERTENSION GUIDELINES / ADHERENCE / MEDICATION ERRORS

Hypertension[1]

Hypertension or high blood pressure affects one in three American adults managed in primary care. Since hypertension is mostly asymptomatic, it can cause a delay in its diagnosis and lead to a decrease in adherence. However, uncontrolled hypertension places the patients at greater risk for heart disease, stroke and kidney disease. Pharmacists play a vital role by screening and monitoring patients and providing counseling on the importance of lifestyle management and medication adherence.

The American College of Cardiology (ACC) and the American Heart Association (AHA) has defined four categories of blood pressure in adults, based on systolic (SBP) and/or diastolic (DBP) readings[2]:

- Normal: SBP<120 mmHg and DPB: <80 mmHg
- Elevated: SBP 120 – 129 mmHg and DBP<80 mmHg
- Hypertension:
  - Stage 1: SBP 130 – 139 mmHg **or** DPB 80 – 89 mmHg
  - Stage 2: ≥140 mmHg **or** DBP ≥90 mmHg
  - Hypertensive crisis: SBP >180mmHg **and/or** DPB >120 mmHg

To get accurate blood pressure readings, before measure the patient blood pressure, make sure he/she has an empty bladder, have both feet touching the floor, use the correct cuff size, hold the arm at heart level, and take at least two measurements. Some essential interventions that we can provide to patients for the prevention and control of high pressure are weight loss (1kg = 2.2 lbs, can lower blood pressure by ~ 1 mmHg), heart healthy diet – DASH (grains, proteins, fruits and vegetables), limit consumption of salt to no more than 1,500 mg per day and smoking cessation.

Nevertheless, certain medications and supplements can contribute to an increase in blood pressure. Examples of these are amphetamines and medications to treat attention deficit (ADHD), decongestants, immunosuppressants, non-steroidal anti-inflammatory drugs (NSAIDs), systemic steroids, antidepressants and some contraceptive pills.

2017 ACC / AHA Guideline for the Prevention, Detection, Evaluation, and Management of High Blood Pressure in Adults.[2]

In 2017, the *American Heart Association* (AHA) and the *American College of Cardiology* (ACC) published the *Guideline for the Prevention, Detection, Evaluation, and Management of High Blood Pressure in Adults.* It presents new guidelines to provide healthcare providers with consistent, clear and evidence-based guidance for the treatment of patients at risk of primary and secondary hypertension.

The guideline includes risk assessment, primary and secondary prevention high blood pressure, lifestyle interventions, and pharmacotherapy.

Due to the extensive information contained in the clinical guideline, this edition of the “Newsletter” for community pharmacies will mainly highlight some of the most significant updates.

Recommendations for Hypertension Treatment:[2,3]

- Guidelines have stablished four drug categories as first-line medications to treat hypertension. These are the **thiazide diuretics, calcium channel blockers** (CCBs), **angiotensin converting enzyme inhibitors** (ACEIs), and **angiotensin receptor blockers** (ARBs).
- Six other classes of medications are classified as second-line therapies for treating hypertension. These are beta-blockers (BB), diuretics, direct renin inhibitor, alpha-1 blockers, alpha-2 central agonists, and direct vasodilators.
- Simultaneous use of an ACE inhibitor, ARB and/ or renin inhibitor (Aliskiren) is potentially harmful and is not recommended for treating adults with hypertension.

Drug class	Comments
Thiazide or thiazide-type diuretics	Chlorthalidone is preferred on the basis of prolonged half-life and proven reduction of CVD events. Monitor for hyponatremia and hypokalemia, uric acid and calcium levels.
ACEi	Do not use if patient has history of angioedema. Avoid in pregnancy. Increased risk of hypercalcemia, especially in patients with CKD or in those on potassium supplements or potassium-sparing drugs.
ARB	Do not use if patient has history of angioedema with ARB's. Patients with a history of angioedema with an ACE inhibitor can receive an ARB beginning 6 weeks after ACE inhibitor is discontinued. Avoid in pregnancy.
CCB	DHP*: Avoid use in patients with HFrEF+ Non-DHP: Avoid routine use with BB because of increased risk of bradycardia and heart block. Do not use in patients with HFrEF+. Diltiazem and verapamil are major CYP3A4 substrate and moderate inhibitor; which can inhibit or accelerate the metabolism of other drugs processed by CYP causing toxicity or therapeutic failure.

*DHP=Dihydropyridine **Non-DHP=No Dihydropyridine
+HFrEF = Heart Failure with Reduced Ejection Fraction

- In adults with confirmed hypertension without additional markers of increase arteriosclerotic cardiovascular disease (ASCVD) risk, a blood pressure of less than 130/80 mmHg may be reasonable.
- Patients who suffer from comorbidities such as diabetes, heart failure, chronic kidney disease, kidney transplantation, stable ischemic heart disease and peripheral arterial disease or who have suffered previous cardiac events, their optimal blood pressure is <130/80 mmHg.
- Non-pharmacological interventions (e.g. diet and exercise) are recommended for patients with high blood pressure or stage 1 hypertension and an estimated 10 – year risk of ASCVD of less than 10%.
- A combination of antihypertensive medication and non-pharmacological interventions is recommended for patients with stage 1 hypertension with an estimated 10 – year ASCVD of 10% or higher.
- Initiation of therapy with two first-line antihypertensive drugs of different classes is recommended in adults with stage 2 hypertension and/or an average blood pressure of more than 20/10 mmHg above target.

Blood Pressure status	Recommended Follow – up / Reassessment
Normal	1 – year follow-up
Elevated	3 – 6 months
Hypertension: Stage 1	• Monthly until BP goal met with BP – lowering medication + nonpharmacological interventions • 3 – 6 months after BP goal met
Hypertension: Stage 2	• Monthly until BP goal met with BP – lowering medication + nonpharmacological interventions • 3 – 6 months after BP goal met

CMS Star Rating

The Center for Medicare and Medicaid Services (CMS) created the Medicare Part D drug benefit, which established a program to measure the quality of health plans that offer this service. These quality measures are applied to various components that are used to determine the Star Rating of a health plan. Since many of the quality measures included in the Star Rating are related to the proper and safe use of medications, pharmacies can play an important role in determining the Star Rating of a health plan, helping to improve medication adherence and patient safety.

How Is Adherence Measured?

Adherence refers to the action of picking up the drug supply, from a new prescription or picking up the refill medication, at a frequency that is just before the drug is completely consumed. Medication adherence is usually measured using the proportion of days covered (PDC).

$$\text{PDC} = \frac{\text{Total Days with Medication Available}}{\text{Evaluated Time Period}}$$

This method uses administrative data from pharmacy claims to calculate the number of days a beneficiary is covered by at least one prescription of the adherence medications, divided by the number of days in the treatment period.

PDC = 25/30 = 0.83 x 100 = 83%
Example: If we evaluated a period of 30 days and for 5 days, the patient was not covered by any medication

Quality Measure	Description	Ways That the Pharmacy Can Promote and Improve Adherence
Hypertension Medication Adherence† • *ACEi* • *ARB* • *Aliskiren*	These measures analyze the percentage of members of a health plan with two or more (> 2) supplies of any of the medications in these categories and that the proportion of days covered (PDC) is equal to or greater than 80%.	1. Using the RxTarget tool 2. Synchronization of medications 3. 90-day supply 4. Sending medications to the patient's home 5. Educational / informational interventions on benefits of therapy and possible side effects 6. Strengthening patient-pharmacist relationship 7. Adherence calls (ACEi, ARB and Aliskiren)
† Adherence metrics can be monitored through the RxTarget platform.		

We Want to Hear From You

The Community Pharmacy Newsletter is dedicated to providing useful and relevant information to our profession and our Pharmacy Network. Is there anything you would like to know more about? Please send a topic to: providercontracting@abarcahealth.com.

Transcription Errors[4,5]

The National Coordinating Council for the Reporting and Prevention of Medication Errors (NCCMERP) defines a medication error (ME) as a preventable event that can cause or lead to the inappropriate use of medications or harm to the patient while the medication is under control. health professional, patient or consumer.

MEs can occur at any step in the drug use process, beginning when a doctor prescribes a drug and ending when the patient receives the drug at the pharmacy. Errors in the interpretation and transcription of a prescription represents only part of the conglomerate of all errors that can occur in dispensing. Some contributing factors are:

- Use of inappropriate abbreviations
- Illegible prescription
- Drugs with similar names
- Interruptions or distractions
- High volume of recipes
- Little staff

Some recommendations to prevent these errors from occurring are:

- Verify that the prescription transcript is correct.
- Use reliable methods to identify patients, as well as other information about them (age, allergies, etc.), helps reduce errors.
- Unreadable writing can put patients at risk. Prescriptions that are illegible or those that use non-standard abbreviations should be verified by calling the doctor rather than trying to decipher what is written. Always clarify any unclear information.

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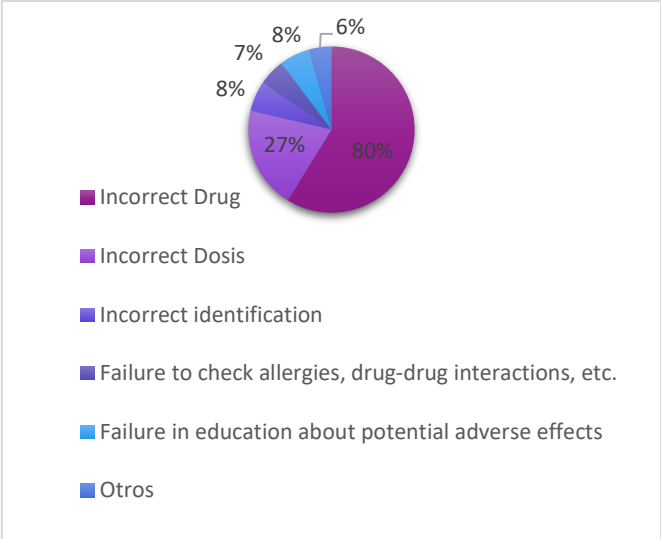
The most common mistakes that occur in the prescription transcription process are:



Drug Recall: July – August 2020[7]

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Date	Generic Name	Recall Reason	Company Name
07/08/2020	Metformin Hydrochloride Extended-Release Tablets, 500mg and 1000mg	NDMA impurity	Lupin Pharmaceuticals, Inc
07/22/2020	Dexmedetomidine Hydrochloride Injection, 200 mcg/50 mL	Cross contamination with lidocaine	Fresenius Kabi
08/05/2020	DDAVP® Nasal Spray 10 mcg/0.1mL, Desmopressin Acetate Nasal Spray 10 mcg/0.1mL, STIMATE® Nasal Spray 1.5 mg/mL	Superpotency	Ferring, Amring, CSL Behring
08/20/2020	Metformin Hydrochloride Extended-Release Tablets USP, 500mg & 750mg	NDMA impurity	Bayshore Pharmaceuticals, LLC
8/31/2020	Tranexamic Acid and Amiodarone HCl injections Generic Name	Vials potentially packaged in incorrect cartons	Mylan N.V.

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