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Advancing *Practice*



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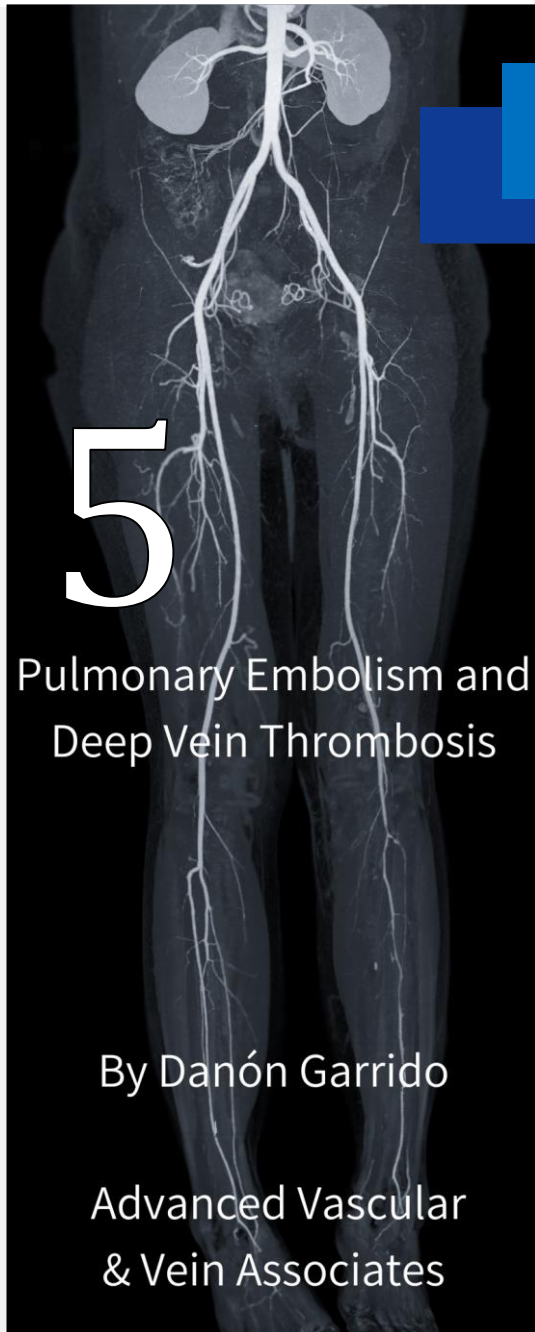
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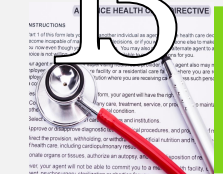
Pulmonary Embolism and Deep Vein Thrombosis

By Danón Garrido

Advanced Vascular & Vein Associates

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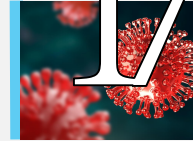
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Advanced Vascular & Vein Associates*

Modern Management of Pulmonary Embolism and Deep Venous Thrombosis

The interplay between deep venous thrombosis (DVT) and pulmonary embolism (PE), collectively known as venous thromboembolism (VTE), continues to be a critical concern in vascular health care. This article delves into contemporary strategies for the diagnosis and treatment of these conditions, with a focus on the evolution of non-surgical interventions that promise to enhance patient outcomes.

Diagnostic Paradigms

Venous thromboembolism (VTE) manifests primarily through two conditions: deep vein thrombosis (DVT) and pulmonary embolism (PE). DVT usually affects the legs,

presenting symptoms such as localized swelling, pain that feels like cramping or soreness, redness, warmth over the affected area, and tenderness along the vein. These symptoms often make the affected limb noticeably different from the other, particularly in terms of swelling and discoloration.

Pulmonary embolism, a more severe condition, occurs when a clot travels to the lungs. Symptoms include sudden shortness of breath, sharp chest pain that worsens with deep breaths, a cough that may produce blood-streaked sputum, rapid heart rate, and sometimes dizziness or a sense of anxiety. Immediate medical

attention is crucial if PE is suspected, as it can be life-threatening and requires prompt treatment to prevent serious complications.

The diagnostic approach to suspected VTE involves a combination of clinical assessment, imaging, and laboratory testing. Traditional imaging techniques like CT Pulmonary Angiography (CTPA) and Ventilation-Perfusion (VQ) scan remain staples in diagnosing PE. For DVT, methods such as venous duplex ultrasound and CT venography provide detailed views of the venous systems.

Risk Stratification: A Cornerstone of VTE Management

VTE presents varying levels of risk, necessitating stratified treatment approaches. Markers of right ventricular (RV) dysfunction and myocardial injury (e.g., elevated troponins and brain natriuretic peptide levels) are pivotal in identifying high-risk patients who may benefit from more aggressive interventions.

The Shift Towards Non-Lytic Mechanical Management

A significant shift in the treatment landscape of VTE is the move towards mechanical thrombectomy systems, which allow for clot removal without the use of thrombolytic drugs. Devices such as the ClotTriever and FlowTriever have revolutionized the field by providing effective clot removal with reduced risk of bleeding and shorter hospital stays. These devices are particularly beneficial for patients at high risk of bleeding or

those who have contraindications to thrombolytic therapy.

Real-world data and clinical trials continue to support the efficacy and safety of these newer interventions. The FLASH registry and CLOUT studies, for instance, have demonstrated significant reductions in pulmonary artery pressure and improvements in RV function post-mechanical thrombectomy, with most patients avoiding the need for intensive care.

Case Studies Highlighting Real-World Application

Clinical vignettes exemplify the practical application and benefits of these advancements. One case involved a 76-year-old female presenting with shortness of breath and chest pain, where rapid thrombus removal via mechanical thrombectomy led to immediate clinical improvement and avoidance of ICU admission with a 2-day hospital length of stay. Another case highlighted a 72-year-old female with a similar presentation, treated effectively under the same protocol.

Long-Term Outcomes and Quality of Life

The long-term management of patients post-VTE intervention is crucial, particularly in preventing post-thrombotic syndrome (PTS). Post-thrombotic syndrome (PTS) is a chronic condition that often develops as a complication following deep vein thrombosis (DVT). It results from damage to the venous valves and veins, which can occur after a clot impedes blood flow,

leading to increased venous pressure and chronic venous insufficiency. Symptoms of PTS include pain, swelling, discoloration, and skin changes in the affected limb, and in severe cases, it can lead to leg ulcers. The severity of PTS can vary, and its management typically involves compression therapy, proper skin care, and in some cases, surgical interventions to improve venous circulation and alleviate symptoms.

Strategies focusing on complete thrombus removal and ensuring good venous outflow can mitigate the risk of PTS and improve long-term outcomes.

When to Refer to Vascular Surgery: Emphasizing Early Intervention

We aim to shift the paradigm toward predominantly outpatient care, encouraging our consulting partners to consider alternatives to sending patients to the Emergency Department for tests and interventions that can be performed more efficiently and cost-effectively in an outpatient setting. This approach is suitable for the vast majority of patients. However, this recommendation should not override the provider's clinical judgment, which must assess each case based on specific circumstances.

In managing venous thromboembolism, the timing of referral to a vascular surgeon can significantly influence patient outcomes. Early intervention is particularly crucial for patients presenting with symptoms of lower extremity pain and swelling, which are often indicative of deep venous thrombosis (DVT).

Same-Day Venous Duplex Study

For any patient presenting with the classic symptoms of DVT, such as unilateral leg swelling, pain, warmth,

and erythema, a same-day venous duplex ultrasound is paramount. This non-invasive study is the gold standard for diagnosing DVT and should be performed immediately if DVT is suspected. The rapid confirmation of the diagnosis allows for quicker initiation of appropriate management strategies, potentially reducing the risk of complications such as pulmonary embolism or post-thrombotic syndrome.

Early Vascular Consultation

Once DVT is confirmed, or if the patient's clinical presentation raises significant concerns for VTE, an early consultation with a vascular surgeon is advised. Vascular surgeons are equipped to assess the severity of the thrombosis and to determine the most appropriate intervention, whether it be anticoagulation therapy, mechanical thrombectomy, or another form of intervention. Early vascular consultation ensures that patients receive specialized care tailored to their specific condition, which can improve treatment efficacy and reduce the likelihood of adverse outcomes.

The Role of Nurse Practitioners

Nurse practitioners play a vital role in the early identification of patients at risk for DVT and in initiating the referral process to vascular surgery. By understanding the signs and symptoms of DVT and the importance of prompt and accurate diagnosis through venous duplex studies, nurse practitioners can expedite the delivery of specialized care. Additionally, their ongoing involvement in caring for patients with VTE, both in acute settings and follow-up, is crucial for ensuring continuity of care and monitoring treatment effectiveness and patient recovery.

Conclusion

The management of PE and DVT has entered a new era characterized by an emphasis on risk stratification and mechanical interventions that prioritize patient safety and recovery. As we adopt these innovations, the role of nurse practitioners and vascular specialists become ever more critical in implementing these advancements effectively, ensuring that patients receive the most advanced care tailored to their specific clinical needs. This overview not only highlights the significant strides made in the field but also underscores the importance of a multidisciplinary approach in managing complex vascular conditions like VTE, ensuring that patient care continues to evolve with the advancements in medical technology and knowledge.

References

- Barco et al. Prognostic value of right ventricular dysfunction or elevated cardiac biomarkers in patients with low-risk pulmonary embolism: a systematic review and meta-analysis. 2018. Published by Oxford University for Press on behalf of the European Society of Cardiology.
- Wells et al. The value of sPESI risk stratification in patients with pulmonary embolism. Springer Science+Business Media, LLC, part of Springer Nature 2019.
- Konstantindes et al. 2014 ESC Guidelines on the diagnosis and management of acute pulmonary embolism. European Heart Journal (2014) 35, 3033–3080.
- Bova et al. A prospective validation of the Bova score in normotensive patients with acute pulmonary embolism. Thromb Res. 2018 May; 165: 107-111.

Rivera-Lebron B, et al; PERT Consortium. Diagnosis, Treatment and Follow Up of Acute Pulmonary Embolism: Consensus Practice from the PERT Consortium. Clin Appl Thromb Hemost. 2019 Jan-Dec.



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Danón E. Garrido, MD

Dr. Danón E. Garrido, a board-certified vascular and endovascular surgeon, is renowned for his treatment of Peripheral Arterial Disease (PAD), carotid disease, aneurysmal conditions, and vein disorders at Advanced Vascular & Vein Associates in Central Mississippi. His approach prioritizes minimally invasive techniques, including same-day lower extremity angioplasty, to ensure immediate access to treatment and swift patient recovery. Dr. Garrido's commitment to advanced vascular care makes him a key asset to the regional medical community. Dr. Garrido will present at the MANP 10th Annual Conference and Membership Meeting July 15-17.

ADVANCE HEALTH CARE DIRECTIVE

INSTRUCTIONS

Part 1 of this form lets you name another individual as agent to make health care decisions if you become incapable of making your own decisions, or if you want someone else to make decisions for you now even though you are still capable. You may also name an alternate agent to act if your first choice is not willing, able, or reasonably available to make decisions for you.

Your agent may be your supervising health care provider. Your agent also may not be your spouse, an employee of your care facility or a residential care facility where you are receiving care, or a person who works for you in a position where you are receiving care.

When you complete this form, your agent will have the right to make decisions for you regarding your care, treatment, service, or procedure to maintain your health and safety, and to maintain your physical condition.

Select the care facilities and institutions.

Approve or disapprove diagnostic tests, medical procedures, and procedures for

Direct the provision, withholding, or withdrawal of artificial nutrition and hydration

of health care, including cardiopulmonary resuscitation

Donate organs or tissues, authorize an autopsy, and the disposition of remains

However, your agent will not be able to consent to psychiatric treatment or

consent to psychosurgery, sterilization, or abortion

Erin Barnes, DNP, FNP-BC

Talking in Code: Initiating Difficult Discussions in Primary Care

Advanced care planning is essential to delivering person-centered care. It allows the patient to have a voice regarding life-prolonging choices in the event of medical emergencies. Given the topic's sensitivity, the patient-provider relationship is elemental to initiating challenging goals of care conversations. Advanced care planning should originate through conversations between primary care providers and patients since there is an existing established relationship and rapport.

Despite an established patient-provider relationship, goals of care conversations can remain difficult to initiate and navigate. Goals of care conversation tools can assist providers in initiating, navigating, and maximizing open discussions (Comer et al., 2020).

Many patients with advanced disease have not established an advanced care plan in the event of a medical emergency. Approximately 37% of adults in the United States have completed an advance directive (Aaron et al., 2022).

The Patient Self-Determination Act of 1990 was sanctioned to encourage competent adults to complete advance directives. Under this act, healthcare organizations must inform patients of their rights to healthcare, assess and document in the medical record whether the patient has an advance directive, and educate staff and communities on issues concerning advance directives (Patient Self-Determination Act, 1990). Despite the sanction of the Patient Self-Determination Act, advanced care planning has remained underutilized even for patients with chronic illnesses such as dementia, cancer, end-stage renal disease, lung disease, heart failure, and advanced age (Stapleton et al., 2014).

According to the Centers for Disease Control and Prevention (CDC, 2023), 356,000 people have an out-of-hospital cardiac arrest in the U.S. annually, and 60-80% die before reaching the hospital. Rubins et al. (2019) noted in a retrospective observational study reviewing 403 cardiac arrest events from 2009 to 2018 that 17.4% of patients who survive an in-hospital cardiac arrest will be discharged with a good neurologic outcome, and overall survival to discharge was 33%. Stapleton et al. (2014) noted older CPR recipients with COPD, advanced malignancy, CHF, cirrhosis, CKD, and diabetes have worse outcomes compared to CPR recipients without chronic disease. Patients without chronic disease who survived hospital discharge had a median survival of 26.7 months. Long-term survival was approximately five months for those with severe COPD, 4.1 months in patients with severe CHF, 3.5 months for patients with severe malignancy, and 2.8 months for patients with severe cirrhosis.

Primary care providers have established patient relationships and are in an excellent position to initiate patient conversations regarding advance care planning. However, given the topic's sensitivity, some providers may not feel comfortable or have experience with difficult conversations (Comer et al., 2020). According to Myers et al. (2017), 75% of PCPs believe that it is their responsibility to initiate advance care planning for Medicare patients, and 89% of patients want PCPs to have these conversations. Perceived provider barriers to imitating goals of care conversations are lack of time, discomfort with the topic, and poor access to accessibility in the EMR. Advance care planning is a reimbursable service that can be incorporated into annual Medicare visits and an MIPS quality measure (American Academy of Family Physicians, n.d.).

Utilizing communication tools such as SPIKES and REMAP can assist in directing goals of care conversations. SPIKES (setting, perception, invitation, knowledge, communication tools assist providers with skills in breaking bad news, responding to strong emotions, and conducting goals of care discussions. Conversation tools assist providers with approaching the clinical situation with empathy, supporting spiritual needs, and identifying patient values and goals to develop a collaborative plan for medical treatment that aligns with the patient's goals. Conversation tools stimulate

opportunities for the patient to express concerns. REMAP communication framework guides conversations through shared decision-making by promoting person-centered end-of-life conversations and identifying end-of-life values (Sekar et al., 2021).

The Patient Self-Determination Act requires that the patient is asked about advanced directives and to document any wishes the patient might have regarding the care they want or do not want. Advance Care Planning is a voluntary face-to-face service covered in the annual Medicare Wellness and MIPS Quality Measure. Conversation tools assist with approaching the clinical situation and identifying patient values and goals before developing a plan for medical treatment. Conversations should be approached with empathy and support for religious and spiritual needs. Conversation tools stimulate opportunities for the patient to express concerns.

In summary, provider assessment and advanced care planning enhance care quality by enriching person-centered care. Advance care planning has remained underutilized even for patients with advanced age, chronic illness, and end-stage disease. Mississippi healthcare providers possess an opportunity to improve person-centered care by initiating difficult discussions of advance care planning and end-of-life goals, incorporating SPIKES and REMAP communication tools to guide discussions, and enhancing therapeutic communication. In addition, providers can increase reimbursement availability while promoting person-centered care.

References

Aaron, S. P., Musacchio, C., & Douglas, S. L. (2022). Understanding factors that predict advance directive completion. *Palliative Medicine Reports*, 3(1), 220–224. <https://doi.org/10.1089/pmr.2021.0073>

American Academy of Family Physicians. (n.d.). Advance care planning. Retrieved March 1, 2024, from <https://www.aaafp.org/family-physician/practice-and-career/getting-paid/coding/advance-care-planning.html>

Center for Disease Control and Prevention. (2023). Cardiac arrest. <https://www.cdc.gov/heartdisease/cardiac-arrest.htm>

Comer, A., Fettig, L., & Torke, A. M. (2020). Identifying goals of care. *Medical Clinics of North America*, 104(5), 767–775. <https://doi.org/10.1016/j.mcna.2020.06.002>

Myers, J. M., Duthie, E., Denson, K., Denson, S., & Simpson, D. (2017). What can a primary care physician discuss with older patients to improve advance directive completion Rates? A Clin-IQ. *Journal of Patient-Centered Research and Reviews*, 4(1), 42–45. <https://doi.org/10.17294/2330-0698.1412>

Patient Self-Determination Act, H.R.5067, 101st Cong. (1990). <https://www.congress.gov/bill/101st-congress/house-bill/5067>

Rubins, J. B., Kinzie, S. D., & Rubins, D. M. (2019). Predicting outcomes of in-hospital cardiac arrest: retrospective US validation of the good outcome following attempted resuscitation score. *Journal of General Internal Medicine*, 34(11), 2530–2535. <https://doi.org/10.1007/s11606-019-05314-x>

Sekar, D. R., Siropaides, C. H., Smith, L. N., & Nguyen, O. K. (2021). Adapting existing resources for serious illness communication skills training for internal medicine residents. *Southern Medical Journal*, 114(5), 283–287. <https://doi.org/10.14423/SMJ.0000000000001247>

Stapleton, R. D., Ehlenbach, W. J., Deyo, R. A., & Curtis, J. R. (2014). Long-term outcomes after in-hospital CPR in older adults with chronic illness. *Chest*, 146(5), 1214–1225. <https://doi.org/10.1378/chest.13-2110>



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Erin Barnes, DNP, FNP-BC

Erin Barnes graduated from Mississippi University for Women with her ADN in 2007, BSN in 2012, MSN in 2016, and DNP in 2024. She has worked in both acute and primary care settings. She currently works as a hospitalist NP in the Golden Triangle area and Lauderdale County. She has been accepted into the University of Pennsylvania post-masters ACNP program beginning May 2024.

10th Anniversary
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Early Registration and
Welcome Reception will be
Sunday, July 14th from
4:00pm -6:00pm.
Membership Meeting will
be on Monday, July 15th.



MAGGIE WHITE, DNP, FNP-BC

RPR and STD: Find Out What It Means to Me

Sexually transmitted diseases (STDs) and sexually transmitted infections (STIs) are a prevalent problem for all age groups. According to the Centers for Disease Control (CDC) (2021), young people ages 15-24 years old account for almost half of all newly diagnosed STIs in the United States. Mississippi is steadily experiencing increases in STIs, especially syphilis. The number of syphilis cases almost tripled from 2013 to 2016 according to the Mississippi State Department of Health (n.d). Men who have sex with

men (MSM) account for 83% of all new syphilis cases and more than half of all new HIV cases are in the MSM population (Center for Disease Control, 2019).

Early detection of STIs makes treatment easier and is crucial for sexual and reproductive health. If STIs are left untreated it could lead to serious complications, especially in females including infertility and cancers. If not treated or treated incorrectly, chlamydia and gonorrhea can lead to pelvic inflammatory disease and lead to

infertility in women (World Health Organization, 2023). The CDC recommends routine STI screenings for adolescents and sexual health risk assessments for sexually active females aged 25 years old or younger. Chlamydia and gonorrhea are often asymptomatic and can go undetected, which is why routine screening is recommended annually (Adolescents, 2021). United States Preventive Services Taskforce (USPSTF) (2020) recommends behavioral counseling to prevent sexually transmitted infections (STIs) for sexually active adolescents and for adults at increased risk and is considered a Grade B recommendation.

STI treatment guidelines were last updated in 2021. Notable updates include treatment for chlamydia and syphilis. Treatment for chlamydia was updated and now doxycycline 100 mg twice a day for seven days is recommended as first line treatment versus the previous treatment of azithromycin 1g in one single dose due to resistance issues with azithromycin. Azithromycin is still the preferred alternative treatment method. Also, testing for clearance is not recommended unless adherence to treatment is in question and testing

less than four weeks after infection can also lead to false positive results (Workowski et al., 2021).

Treatment for syphilis can be complex and complicated. According to CDC guidelines, the preferred treatment for syphilis is penicillin G but dosage and length of treatment depends on the stage of the disease (Workowski et al., 2021). The Center for Disease Control and Prevention MMWR Recommendation and Reports (Workowski et al., 2021) outlines syphilis treatment. Treatment for tertiary treatment and late latent syphilis require a longer treatment regimen. The treatment is penicillin G, but it is critical to treat syphilis with the correct form of penicillin G. Bicillin L-A is recommended for treatment versus Bicillin C-R because *T. pallidum*, the organism that causes syphilis, can harbor in certain sites in the body that are only reached by certain forms of penicillin. Treatment for primary, secondary, and early latent syphilis is Bicillin L-A 2.4 million units IM in a single dose whereas the treatment for late latent syphilis is Bicillin L-A 2.4 million units IM

administered at one-week intervals for three weeks which comes to a total of Bicillin L-A 7.2 million units IM. Follow-up for syphilis includes a nontreponemal test titer at six months, 12 months, and 24 months. The alternative syphilis treatment for those allergic to penicillin is doxycycline 100mg twice a day for 14 days for primary and secondary syphilis and doxycycline 100mg twice a day for 28 days for latent syphilis. Treatment is successful if there is a fourfold decrease in the nontreponemal test titer at the 6 month follow-up (Workowski et al., 2021).

Recently, a penicillin G shortage has been causing problems appropriately and adequately treating syphilis. The CDC has encouraged the following to help battle the penicillin shortage. First, monitor local Bicillin L-A inventory to monitor local usage and supply of Bicillin L-A. Second, prescribe doxycycline, the alternative regimen, for all nonpregnant patients and save Bicillin L-A for pregnant women and babies with congenital syphilis. Third, make sure to appropriately stage syphilis cases to ensure that the correct amount of Bicillin L-A is used since primary, secondary, and early latent stages only require

2.4 million units compared to late latent which requires 7.2 million units. Lastly, continue communication with local health departments and pharmacists so others are aware of the shortage and can adequately plan treatment for other patients (Clinical Reminders during Bicillin L-A Shortage, 2023).

Mississippi healthcare providers can be instrumental in decreasing STIs. Nurse practitioners can increase STI screening frequency of all sexually active adolescents and adults and increase STI education in the high-risk age group. Healthcare providers can also strive to stay updated on new treatment guidelines to decrease their risk of inadequate treatment. These actions will decrease the number of STIs being transmitted and improve the overall health of patients in our state.

References:

Centers for Disease Control and Prevention. (2021, August 3). Adolescents. [www.cdc.gov. https://www.cdc.gov/std/treatment-guidelines/adolescents.htm](https://www.cdc.gov/std/treatment-guidelines/adolescents.htm)

Centers for Disease Control and Prevention. (2019). Gay Men and STDs. <https://www.cdc.gov/std/life-stages-populations/stdfact-msm.htm>

Centers for Disease Control and Prevention. (2023, July 26). Clinical Reminders during Bicillin L-A@ Shortage. <https://www.cdc.gov/std/dstdd/cl/2023-july-20-Mena-BicillinLA.htm>

Mississippi State Department of Health. (n.d.). Syphilis in Mississippi. <https://msdh.ms.gov/page/14,18642,150.html>

U.S. Preventive Services Task Force. (2020, August 18). Sexually transmitted infections: Behavioral counseling. <https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/sexually-transmitted-infections-behavioral-counseling>

Workowski, K., Bachmann, L., Chan, P. et al. Sexually Transmitted Infections Treatment Guidelines, 2021. MMWR Recomm Rep 2021; 70(4) 2021 <https://www.cdc.gov/std/treatment-guidelines/STI-Guidelines-2021.pdf>

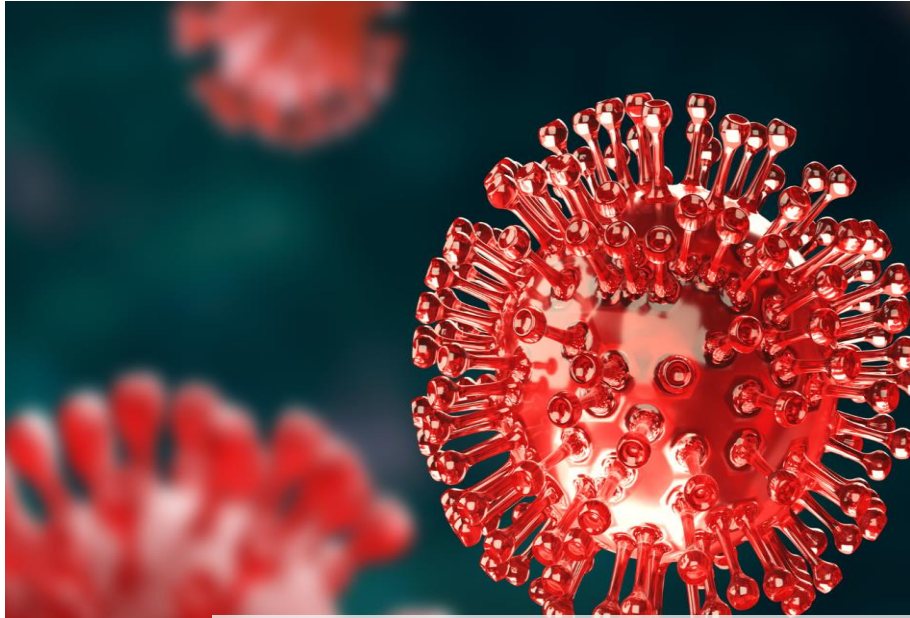
World Health Organization. (2023, July 10). Sexually transmitted infections (STIs). [https://www.who.int/news-room/fact-sheets/detail/sexually-transmitted-infections-\(stis\)](https://www.who.int/news-room/fact-sheets/detail/sexually-transmitted-infections-(stis))



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Maggie H. White, DNP, FNP-BC

Maggie White has been a nurse for over ten years and a family nurse practitioner for the last three. She is the nurse practitioner and clinical director at Five Horizons Health Services in Starkville, MS where she focuses on sexual wellness and HIV care. She received her MSN from Mississippi University for Women in 2021 and recently graduated with her DNP from MUW as well. For her DNP clinical practice project, she focused on STI education and increased screenings in the college-aged female.



Kajuandra Chandler-McDuffy, DNP, FNP-C

PrEParing the Provider

As a practitioner, we desire the best possible prognosis for our clients. We stay abreast of all the latest technology and changes in healthcare. One specific health condition we have been in combat with for more than 40 years is HIV-1 infection. The rates of HIV transmission are still increasing. This disease affects all body systems. This disease costs billions of healthcare dollars annually. Despite highly effective drugs for HIV prevention on the market, only a small proportion of at-risk individuals in the United States,

even in our home state of Mississippi are taking them. Most at-risk individuals lack knowledge of these drugs or even know they are an option. Several factors presume a patient is exhibiting high at-risk behaviors. Parenteral exposure through needle sharing during injection drug use and multiple sex partners with highest incidence through receptive anal intercourse (CDC, 2020).

These specific drugs are called pre-exposure prophylaxis (PrEP) which are 99% effective in the

prevention of HIV infection through sexual and blood contact. Since 2012, three FDA-approved PrEP medications have been available on the drug market. Truvada, the most common, is taken orally daily. Descovy is taken orally daily, but not prescribed to those individuals assigned female at birth. Apretude is the only injectable PrEP medication available. According to an estimate from the Centers of Disease Control and Prevention (CDC), only one-third of the 1.2 million Americans who can benefit from PrEP are taking the medications (CDC, 2023).

For the fraction of at-risk individuals who utilize PrEP, it is very imperative for providers to implement PrEP education and boost utilization in their practice. The more Americans that are aware of PrEP, the better the chances for reducing the transmission rate and Ending the HIV Epidemic by 2030. In Mississippi, more than 10,000 people live with HIV. Increasing numbers are found in the Mississippi Delta at rates of 17.8 per 100,000 persons. This number is significantly greater than the national average of 11.2 per 100,000 persons (Mississippi Department of Health, 2023). The steady increase in HIV rates in

Mississippi should prompt providers to complete educational training on PrEP implementation and educate their clients on the availability of PrEP. At-risk individuals should know that PrEP is available at local pharmacies and that they do not have to travel to the next big town for Walgreens or CVS. These individuals should also know they do not need referrals to an Infectious Disease Clinic or travel to Chicago to receive PrEP prescriptions when they can be obtained right in their trusted provider's office. These small misconceptions can be corrected to help so many whose lives are at stake from contracting HIV.

HIV has been an epidemic for far too long, this battle is still in effect. As healthcare providers, we are on the frontlines of the medical domain to help end this epidemic. It was once said by Dr. Jonathan Mermin, National CDC Director, "one of our most powerful tools against HIV prevention remains largely on pharmacy shelves" (Mermin, 2018). Preparing providers for PrEP implementation is not as complex as it sounds. Lack of knowledge and education are a major part of the complexity

and multifactorial layers that inhibit PrEP initiation by primary care providers. Perceived barriers for PrEP prescriptions by family practice and primary care providers include lack of specialized training, preparation, and tools to prescribe PrEP which leads to lower comfort levels in prescribing the medication (Henry et. al, 2019). Providers can complete a series of webinars and in service sponsored by HealthHIV online at their convenience. The Centers for Disease Control and Prevention as well as the Mississippi Department of Health websites offer a printable practice guideline for providers to closely follow when prescribing PrEP. The provider does not have to complete any HIV training for certification in PrEP but having a certificate of completion from continuing education displayed would help ease the client's apprehension of starting PrEP.

In summation, as a practicing provider in this great state of Mississippi, I am proposing that all other prestigious practitioners to simply assess those at risk individuals during an annual wellness exam or encounter for STD testing to offer any knowledge on PrEP. Improving provider prescribing

practices for PrEP will improve outcomes for reduction in HIV transmission. In doing this small task together collectively we can reduce that startling numbers of new HIV diagnoses in Mississippi.

References:

Centers for Disease Control and Prevention. (2020). HIV Risk and Prevention. www.cdc.gov

Henry, M., Garcia-Reid, P. & Reid, R.J. (2019). Sexual negotiation skills and risky behavior on, Sexual partnerships, HIV knowledge, and risk perception among urban youth of color: A latent class analysis. Journal of HIV/AIDS & social services, 18(3), 248-264.

Mermin, J. (2018). HIV Prevention Pill Not Reaching Most Americans Who Could Benefit—Especially People of Color. <https://www.cdc.gov/nchhstp/newsroom/2018/croi-2018-PrEP-press-release.html>

Mississippi State Department of Health. (2021). HIV Prevention Program. <https://msdh.ms.gov/page/14,0,150.html>

Affordable testing for chlamydia, gonorrhea, syphilis and HIV infection is available from any [county health department](#), and through partnerships with other clinics, correctional facilities, academic institutions, and community-based organizations.

If your patient needs HIV treatment or assistance, they can call 800-826-2961 or 601-362-4879 for more information.

Resources

[PrEP providers \(PDF list\)](#)

[Billing Coding Guide for HIV Prevention](#)

[PrEP ICD-10 Codes](#)

[Medical Codes for HIV Testing](#)

[MS AIDS Education Training Center- UMMC](#)

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Kajuandra Chandler-McDuffy, is a native of Indianola, MS. She has practiced nursing since 2007 and is a DNP graduate from Mississippi University for Women May 2024. She is a member of the American Association of Nurse Practitioners, MS Nurses Association, Infusion Nurse Society, and Sigma Theta Tau Honors Society. After graduation, she plans to continue advocating for those individuals at risk for HIV in Mississippi. She is currently working at Vital Screen, LLC.

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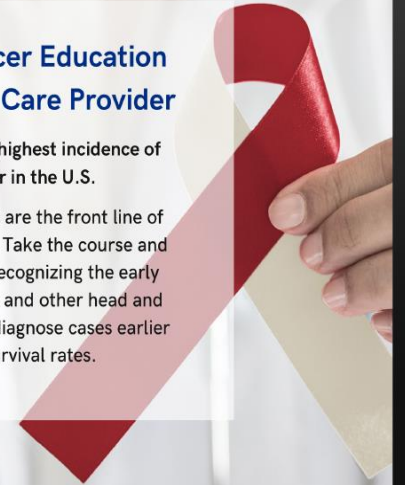
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Attention Please in Peds

Mollie Cornelius, DNP, FNP-BC

Attention deficit hyperactivity disorder (ADHD) is a growing issue in the pediatric population in the United States of America with 9.8% of children under the age of 17 having a diagnosis of ADHD. Mississippi has an exponentially higher instance of ADHD in the under 17 years population at 15.8% (CDC, 2023). Therefore, family nurse practitioners in Mississippi must know how to manage ADHD safely and effectively in the primary care setting. Identifying appropriate stimulants and non-stimulants, recognizing common side effects with these medications, and utilizing laboratory tests or procedures when managing pediatric patients with ADHD will reinforce family nurse practitioners' confidence and encourage safe practice.

The pediatric population in Mississippi with a diagnosis of ADHD is more frequently treated with medication at 73.8% than with behavioral therapy at 50.1% (CDC, 2023). With ADHD, medication management is highly effective, but prescribing controlled substances can be intimidating for many family nurse practitioners (Eiland & Gildon, 2024).

Before agreeing to provide medication management, determine whether the patient has an official diagnosis from a psychiatrist, psychologist, or pediatrician, as these are the appropriate healthcare personnel to provide an evaluation and ADHD diagnosis. Investigating the patients past medical history and family medical history is important when developing a

treatment plan (Eiland & Gildon, 2024). Also, utilizing assessment tools such as the National Institute for Children's Health Quality (NICHQ) Vanderbilt Assessment Follow-up Informant or Conners Rating Scale to help discern what the teachers or parents witness the patient experiencing and interviewing the patient in detail can assist in determining the effectiveness of medication (NICHQ, 2011).

The two main categories of stimulant medications are amphetamine and methylphenidate. Medications such as Adderall XR, Adzenys XR-ODT, Dyanavel, and Vyvanse are all long-acting medications in the amphetamine drug family (U.S. Food and Drug Administration, 2007). These medications are approved for ages 6 years and older and average approximately 8 to 10 hours of effectiveness. Mydayis is the exception in this category. This medication is FDA-approved for 13 years of age and older and lasts approximately 14 to 16 hours. These medications are beneficial for providing patients with the ability to focus throughout the school day and wear off in time to eat their evening meal. Pro-centra, Adderall, Evekeo, and Zenzedi are all short-acting amphetamines. These medications are approved for as young as 3 years of age and will provide approximately 4 to 6 hours of effectiveness (Eiland & Gildon, 2024; Farzam & Saadabadi, 2022; Wolraich et al., 2019).

Methylphenidate medications such as Concerta, Cotempla XR-ODT,

Focalin XR, Quillivant XR, Ritalin LA, Daytrana, and Metadate CD are long-acting medications that effectively provide approximately 8 to 12 hours. Jornay PM is the only stimulant medication that is prescribed to be given at bedtime. These medications are manufactured in different forms to provide individualized treatment plans. Daytrana is a patch replaced weekly, Cotempla XR-ODT is a dissolvable tablet, and Quillivant XR is a liquid medication. Long-acting methylphenidates are only FDA-approved for ages 6 years and older. Short-acting methylphenidates such as Focalin, Ritalin, and Methylin solution are approved for ages 6 or older and will provide approximately 4 to 6 hours of effectiveness (Eiland & Gildon, 2024). Stimulant medications are controlled substances and there is a risk for addiction, but long-acting stimulants are less likely to be utilized for abuse purposes and they are harder to break down on the molecular level (AAFP, 2020).

Choosing the right medication is specific to each patient and will require a thorough history and interview with the patient and guardian prior to a final decision. For options that are not considered controlled substances and have no possibility for abuse, non-stimulants are a good route. These medications are Intuniv, Kapvay, Strattera, and Qelbree. Non-stimulant medications must be taken daily and will take time to provide evidence of effectiveness. As with all medications, there are possible side effects that should be discussed and monitored but these medications are not at risk for abuse (Eiland & Gildon, 2024).

Aside from addiction, common side effects of stimulant medication can easily be found in different resources such as Epocrates (Epocrates, 2024). The most common side effects for stimulant medication that should be closely monitored are anorexia, headaches, abdominal pain, insomnia, anxiety, and elevated blood pressure. Anxiety and ADHD have similar characteristics which can be confused. Stimulants can act as amplifiers for anxiety, therefore a patient with ADHD should be monitored for anxiety as well. With tachycardia and elevated blood pressure a possible side effect, some patients may not tolerate stimulants (Eiland & Gildon, 2024; Wolraich et al., 2019).

Taking medications for extended periods of time can cause stress on different organ systems in the body. The liver metabolizes these medications, and the kidneys filter their byproducts out of the body, therefore assessing a comprehensive metabolic panel yearly may be beneficial. Stimulant medications can cause cardiovascular issues and evaluations, such as electrocardiograms, may be necessary (Eiland & Gildon, 2024). Since disorders such as hypo or hyperthyroidism can have symptoms similar to ADHD laboratory values such as thyroid stimulating hormone should be considered for evaluation (Wolraich et al., 2019).

This article aims to bridge the gap in family nurse practitioners' knowledge regarding managing pediatric patients with ADHD. Improving the knowledge level of family practice nurse practitioners regarding medication management of ADHD by discussing appropriate guidelines and recommended monitoring will provide the pediatric population of Mississippi who have been diagnosed with ADHD improved treatment outcome.

References

AAFP. (2020). Risk reduction. AAFP. <https://www.aafp.org/family-physician/patient-care/prevention-wellness/emotional-wellbeing/adhd-toolkit/risk-reduction.html#:~:text=Short%2Dacting%20stimulant%20medications%20are,less%20likely%20to%20be%20abused>

Centers for Disease Control and Prevention. (2023). Data and statistics about ADHD. Centers for Disease Control and Prevention. Retrieved March 17, 2024, from <https://www.cdc.gov/ncbddd/adhd/data.html>

Eiland, L. S., & Gildon, B. L. (2024). Diagnosis and treatment of ADHD in the pediatric population. The journal of pediatric pharmacology and therapeutics: JPPT: the official journal of PPAG, 29(2), 107–118. <https://doi.org/10.5863/1551-6776-29.2.107>

Epocrates. (2024). Point of care medical application. Athenahealth. Retrieved March 17, 2024, from <https://www.epocrates.com/home>

Farzam, K., Faizy, R. M., & Saadabadi, A. (2022). Stimulants - Statpearls - NCBI bookshelf. National Center for Biotechnology Information. Retrieved March 17, 2024, from <https://www.ncbi.nlm.nih.gov/books/NBK539896/>

National Institute for Children's Health Quality. (2011). NICHQ Vanderbilt assessment scales. Encyclopedia of Child Behavior and Development. https://doi.org/10.1007/978-0-387-79061-9_6310

Wolraich, M. L., Hagan, et.al., (2019). Clinical practice guideline for the diagnosis, evaluation, and treatment of attention-deficit/hyperactivity disorder in children and adolescents. American academy of pediatrics. 144(4), 25.



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Mollie Cornelius is a family nurse practitioner practicing at Allegro Family Clinic in Columbus, MS. She began her nursing career in 2011 with a bachelor's degree from MUW and completed her master's degree as a family nurse practitioner in 2015 from UMMC. Mollie has a passion for pediatrics and has cared for the children in Lowndes County, MS for the past 9 years. Recently, Mollie completed her DNP degree from MUW and concluded her practice change project with a focus on ADHD in the elementary-age child and improving communication between parents, teachers, and healthcare providers. Mollie is a member of MS Association of Nurse Practitioners.

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Growing Knowledge: Cannabis in Primary Care

In Mississippi, medical cannabis is a completely legal form of treatment that is reaping many benefits for qualifying patients. Overwhelming support was shown for Senate Bill 2095 passed by Mississippi legislation with over thirty-seven thousand participants enrolled in the Medical Cannabis Program within the state. January 2023, Mississippi became the thirty-seventh state to pass some form of legislation regarding the legal use of cannabis. Since then, many individuals report extraordinary benefits, including the discontinuation of dependent medications. According to guidelines provided by the program, anyone under the age of 18 must see two medical doctors to receive

a medical cannabis card. Two non-affiliated providers must evaluate patients aged 18-24 years. At least one provider must be a Medical Doctor or a Doctor of Osteopathic Medicine. Patients 25 years and older require a visit with one provider. This must be a bona fide provider-patient relationship but does not require the provider to be a physician.

Providers do not “prescribe” medical cannabis. Providers certify patients as having one of the qualifying diagnoses set forth by the Mississippi State Department of Health. Medical cannabis can be used for neurological conditions, including Parkinson’s, Huntington’s, and Alzheimer’s, psychiatric conditions,

including depression, anxiety, PTSD, cancer, HIV and/or AIDS, genetic disorders, like sickle cell disease, and disease or medical conditions that produce one or more of the criteria such as seizures and chronic pain. An all-inclusive list of qualifying diagnoses can be found at <https://www.mmcp.ms.gov/about/qualifying-medical-conditions>.

If a patient is considering medical cannabis, they should first discuss this option with their primary care provider and all members of their healthcare team. Providers can choose not to care for a patient in the Mississippi Medical Cannabis program. Those who choose not to have this personal discussion risk jeopardizing their relationships with their providers. For example, anyone seeking to be certified and in the care of a pain management provider should discuss potential use with their pain management provider. If this is not first discussed, they risk breaching their pain contract with their pain provider. If it is decided that medical cannabis is a treatment that is agreed upon to be beneficial to one’s health, the next step is to schedule a visit with a certified provider. The patient must provide any medical records necessary for the certifying provider.

As knowledge continues to grow about the Mississippi Medical Cannabis Program, it is important to grow a provider’s knowledge to address misconceptions also continue to grow. One of the common misconceptions is that

medical cannabis is prescribed. Providers certify that a patient has a diagnosis or qualifying conditions approved by the cannabis program. Another misconception is that employers do not recognize those in the Mississippi Medical Cannabis Program. If the employer has a no-tolerance policy, they do not have to breach this policy for those who use medical cannabis. One of the biggest misconceptions is that, by being a part of the medical cannabis program, gun rights are forfeited, which is false. Clarification on this law can be found in Miss. Code. Ann. 41-137-15 (West) and Miss. Code. Ann. 41-29-152 (1). Some believe that the amount of medical cannabis that one can receive is unlimited. However, it is regulated by all sales being reported to the Mississippi Board of Pharmacy.

Anxiety is a condition that is typically associated with PTSD. However, it is not one of the qualifying diagnoses for medical cannabis use alone. There is limited data available to support medical cannabis use for any medical condition. Lack of research associated with medical cannabis use creates a barrier in its full definition. Due to medical cannabis being a Schedule II substance, more research is needed to define its risk and benefits to determine its full potential in the treatment of any medical diagnosis. In many instances, there are evident benefits, but risks always exist in any medical treatment.

With the thousands of participants in the Mississippi Medical Cannabis Program and the number rising daily, providers across the state should enhance their knowledge of the potential benefits and risks of medical cannabis. Qualifying diagnoses outline who is eligible for its use. If one is considering implementing medical cannabis into their regimen, they should discuss this possibility with anyone involved in their healthcare. Since research continues to bring forth more knowledge on cannabis, false information continues to grow as well. Because of this, it is important to be able to identify the truth. At the rate it is going, medical cannabis could eventually be the final answer to many medical conditions.

REFERENCES

- Centers for Disease Control and Prevention. (2022, September 14). Depression and anxiety. Centers for Disease Control and Prevention. Retrieved November 1, 2022, from <https://www.cdc.gov/tobacco/campaign/tips/diseases/depression-anxiety.html>
- Mississippi Legislature. (2022, January 26). Senate Bill 2095. Mississippi Legislature. Retrieved August 1, 2022, from <http://billstatis.ls.state.ms.us/2022/pdf/history/SB/SB2095.xml>
- Mississippi State Department of Health. (2024). Mississippi Medical Cannabis. Retrieved April 1, 2024, from <https://www.mmcp.ms.gov>



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Christina began her nursing career by earning her Associates Degree in Nursing in 1997 from Northwest Community College in Senatobia, MS. In 2003, she received her Baccalaureate degree from the University of Mississippi Medical Center in Jackson. She later received her Masters degree and was certified as a Family Nurse Practitioner in 2005 from UMMC in Jackson, MS. She completed her Doctor of Nursing Practice in May 2024 from Mississippi University for Women in Columbus, MS, where she graduated with honors. She is a member of MS Association of Nurse Practitioners, Phi Kappa Phi, and Sigma Theta Tau. She was awarded the “Art of Caring Doctoral Nursing” Award for exemplary compassion shown to others in clinical and classroom settings. Christina is the owner and Nurse Practitioner at Marshall Urgent Care in Holly Springs, MS. Her doctoral project was Adequate Treatment Options for Patients with Anxiety and Depression Who Use Cannabis.



Sweet Success: Self-Management of Diabetes Mellitus

Rebecca Johnston, DNP, FNP-C

In the state of Mississippi, there are approximately 308,000 adults who have been diagnosed with Type 2 Diabetes Mellitus. It is estimated that approximately 75,000 adult Mississippians have Type 2 Diabetes Mellitus but are undiagnosed. The diagnosis rate of Type 2 Diabetes Mellitus continues to rise at a staggering rate. One of the most critical roles of Nurse Practitioners in improving disease outcomes is providing proper patient education. It is crucial to equip these patients with the necessary tools to self-manage their condition.

It is recommended that education on the prevention and management of Type 2 Diabetes Mellitus be provided

to any adult who seeks knowledge. This may include patients who are diagnosed and those who are at risk for developing Diabetes. Proper education of patients could bring a better understanding of self-management of Type 2 Diabetes Mellitus to the patients and families, decreasing treatment costs and improving health outcomes. This can ensure that timely treatment decisions rely on evidence-based guidelines, include social community support, and are made collaboratively with patients based on individual preferences, prognoses, comorbidities, and informed financial considerations. With aligned approaches to diabetes management with the Chronic Care Model. This

model emphasizes person-centered team care, integrated long-term treatment approaches to diabetes and comorbidities, and ongoing collaborative communication and goal setting between all team members. Healthcare providers who modify their clinical practice based on these evidence-based practices can directly impact the health of their community. Proper education on the management and prevention of diseases can potentially improve community health.

Individualized teaching is crucial when it comes to managing Type 2 Diabetes Mellitus. The teaching process should include the following information: the causes of the disease, guidelines for glucose testing, tips for managing symptoms, advice on modifying one's diet, guidance on proper portion sizes, and other educational tips that can help manage this condition. Proper education on prescription drugs should be prioritized. Patients are often given prescriptions for medication without receiving sufficient education about their usage and potential side effects.

The implementation of a Type 2 Diabetes Mellitus self-management program in the community can increase awareness about the causes of the disease. Studies have shown that providing educational tools to patients can improve their confidence in managing the condition. Healthcare providers should also be aware of the impact that a diagnosis of Type 2 Diabetes Mellitus has on an

individual. A diagnosis of diabetes is a lifelong journey that affects the physical, psychological, and social well-being of the patient and those around them. Educating patients about healthier lifestyle choices is as important as prescribing the right medication.

The medical community needs to focus on providing clear and easy-to-understand education to patients regarding diabetes management. The costs associated with managing diabetes are increasing, and it is crucial to establish community-based programs that can help patients and their families to better understand self-management. By doing so, the expenses can be reduced, and health outcomes can be improved. Home health agencies and clinics could implement similar programs to improve outcomes in the future. It would be beneficial to conduct further research and share the findings with colleagues from other areas to promote teaching on self-management of Type 2 Diabetes Mellitus. This manual could help manage Type 2 diabetes by providing easy navigation for all patients. This manual could help manage Type 2 diabetes by providing easy navigation for all patients.

In conclusion, Type 2 Diabetes Mellitus is a complex disease process that requires the cooperation of both the patient and healthcare provider to ensure positive outcomes. Merely prescribing medications and

providing minimal instructions is not sufficient. Let's work together to enhance the standard of care provided to patients, in turn improving quality of life and reducing the expenses associated with this disease process.

References

Helgeson, V. S., Horner, F. S., & Naqvi, J. B. (2022). Partner involvement in Type 2 diabetes self-management: a mixed-methods investigation. *Diabetes Spectrum*, 35(1), 102–110. <https://doi.org/10.2337/ds21-0034>

Hill-Briggs, F., Adler, N. E., Berkiwicz, S. A., et al., (2021). Social determinants of health and Diabetes: a scientific review. *Diabetes Care*, 44(1), 258–279.

Peterson, M. P. (2018). American diabetes association; economic cost of diabetes in the US in 2017. *Diabetes Care*, 41(5), 917–928. Retrieved October 25, 2022, from <https://doi.org/10.2337/dci18-0007>

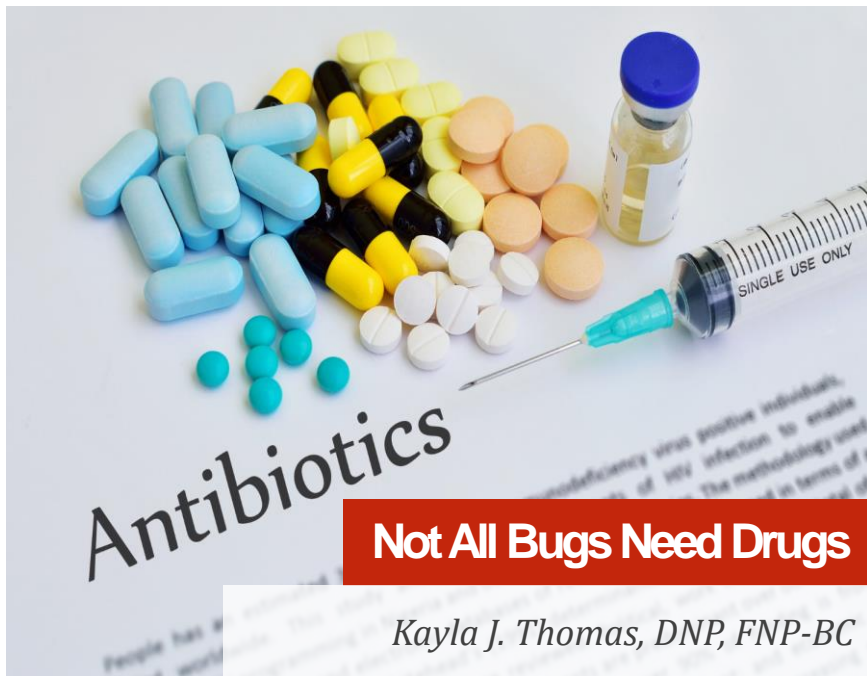
Saunders, T. (2019). Type 2 diabetes self-management barriers in older adults: an integrative review of the qualitative literature. *Journal of Gerontological Nursing*, 45(3), 43–54. Retrieved October 15, 2022, from <https://doi.org/10.3928/00989134-20190211-05>



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Kayla J. Thomas, DNP, FNP-BC

One of the key principles of antibiotic stewardship is the recognition that not all infections require antibiotics. Many common infections, such as the common cold, influenza, and most cases of acute pharyngitis and bronchitis are caused by viruses and do not respond to antibiotics. Despite this, antibiotics are often prescribed unnecessarily for these conditions, contributing to the emergence of antibiotic-resistant bacteria. Currently, antibiotic-resistant bacteria kills 700,000 people every year (Tarín-Pelló et al., 2022). Efforts aim to reduce unnecessary antibiotic prescriptions and minimize the development of antibiotic resistance by educating healthcare providers and their patients about the appropriate use of antibiotics.

Sore throat is a common presenting complaint in most clinic settings and emergency departments. The probability that beta-hemolytic streptococci is causing the tonsillopharyngitis can be estimated using a diagnostic scoring system (Buensalido, 2023). The Centor score is a clinical tool used to assess the likelihood of a bacterial etiology, specifically group A streptococcal pharyngitis, in patients presenting with acute pharyngitis or sore throat. It helps healthcare providers make more informed decisions regarding the need for antibiotic treatment which contributes to antibiotic stewardship efforts. The Centers for Disease Control and Prevention (CDC) and the American College of Physicians-American Society of Internal Medicine

(ACP-ASIM) endorse the Centor score to determine the risk of GAS infection and to guide the management of acute pharyngitis. The score is generally based on four clinical criteria.

The presence of fever (temperature $\geq 38^{\circ}\text{C}$ or 100.4°F), tonsillar exudates, and tender anterior cervical lymphadenopathy would each individually receive one point. One point is subtracted if the patient reports the absence of a cough. Each criterion is assigned one point, resulting in a total score ranging from 0 to 4. The higher the score, the greater the likelihood of streptococcal pharyngitis.

The Centor score helps guide healthcare providers in determining whether antibiotic treatment is warranted for acute pharyngitis. While a high score increases the likelihood of a bacterial infection and may support antibiotic treatment, a low score suggests a viral etiology, for which antibiotics would be unnecessary. This scoring system is valuable in antibiotic stewardship efforts because it aids in the appropriate use of antibiotics. By identifying patients who are unlikely to benefit from antibiotic therapy as determined by a low Centor score, unnecessary antibiotic prescriptions can be avoided, reducing the risk of antibiotic resistance and adverse effects associated with antibiotic use. Conversely, in patients with a high Centor score, indicating a higher probability of bacterial infection, antibiotics may be justified to alleviate

symptoms and prevent complications such as rheumatic fever or peritonsillar abscess. In summary, the Centor score serves as a valuable tool in antibiotic stewardship by assisting healthcare providers in making evidence-based decisions regarding antibiotic treatment for acute pharyngitis, thereby promoting appropriate use of antibiotics and helping to combat antibiotic resistance.

Another way to be good stewards of antibiotics in urgent and primary care settings along with acute care settings is by utilizing the biomarker Procalcitonin (PCT). Cough and congestion are common presenting complaints in almost all clinic settings. This biomarker can be drawn to help determine whether an acute lower respiratory tract infection is viral vs bacterial. PCT levels are normally low in healthy individuals but tend to rise in the presence of bacterial infections. Viral infections typically suppress the cytokines that drive Procalcitonin synthesis. It is often difficult to decipher whether symptoms of cough, rhinorrhea, nasal congestion are viral or bacterial in patients presenting to urgent and primary care clinics. In which cases, so long as the patient is not an older adult at risk for pneumonia and/or immunocompromised, it may be safe to withhold antibiotic therapy, draw a PCT, and treat the patient symptomatically until the results return. As a send-out lab in urgent and primary care clinics, PCT results may come back as soon as the next day. The cost

for this test varies, but it pays forward by potentially reducing costs for antibiotic treatment and hospitalization.

There is a growing use of PCT to facilitate the diagnosis and management of sepsis, bacterial lower respiratory tract infections, and guide antibiotic therapy. Antibiotic therapy guided by procalcitonin levels as one of the diagnostic markers has been the subject of many studies and clinical trials. PCT is a biomarker that has attracted attention as a tool to guide antibiotic treatment decisions especially in differentiating bacterial infections from viral infections and reducing antibiotic overuse. This method contributes to antibiotic stewardship efforts in acute care, urgent care, and primary care settings. Antibiotics must be prescribed judiciously for acute illnesses as not all bugs are created equal.

REFERENCES

Buensalido, Joseph Adrian L. (2023). Bacterial pharyngitis workup. Approach Considerations, Laboratory Studies, Imaging Studies. <https://emedicine.medscape.com/article/225243-workup?form=fpf>

Tarín-Pelló A., Suay-García B., Pérez-Gracia M.T. (2022). Antibiotic resistant bacteria:

current situation and treatment options to accelerate the development of a new antimicrobial arsenal. Expert Review of Anti-Infective Therapy 20(8):1095-1108.

<https://doi.org/10.1080/14787210.2022.2078308>

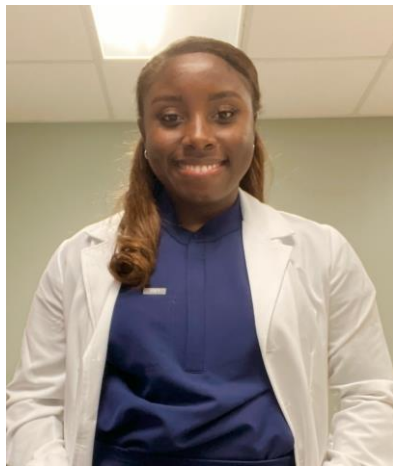


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Matt Gatlin PhD, FNP, COI

Resistant UTI: A Growing Threat

The Centers for Disease Control and Prevention (CDC) reports that around 236 million courses of antibiotics are prescribed annually in the United States. UTIs account for around 15% of outpatient antibiotic prescriptions in the U.S., or about 40 million prescriptions annually. Unfortunately, treatment is becoming increasingly complex due to the rising prevalence of antibiotic-resistant bacteria, which the World Health Organization (WHO) has classified as a global public health threat. Antibiotic-resistant

bacteria are estimated to cause 15-25% of uncomplicated UTIs and even higher for complicated UTIs.

The Enterobacteriaceae family, including *Escherichia coli*, *Klebsiella*, and *Proteus*, and the Enterococcaceae family, including *Enterococcus faecium* and *Enterococcus faecalis*, are capable of producing resistant mechanisms such as extended-spectrum beta-lactamases (ESBLs) and Vancomycin-resistant Enterococci (VRE). These resistant pathogens are

are relatively new in evolutionary terms, with the first cases of ESBLs and VRE in the U.S. being reported in the mid to late 1980s.

When treating uncomplicated UTIs without resistant organisms, the Infectious Diseases Society of America (IDSA) recommends Nitrofurantoin (Macrobid), Trimethoprim-sulfamethoxazole (Bactrim), or Fosfomycin (Monurol) as first-line. Fluoroquinolones should be reserved for severe symptoms, treatment with antibiotics other than fluoroquinolones within the past three months, or allergies to first-line antibiotics. It is essential to note that Moxifloxacin (Avelox) should not be utilized, as it does not attain sufficient urinary concentration levels as compared to Ciprofloxacin (Cipro) and Levofloxacin (Levaquin).

UTI treatment is often challenging when resistant bacteria are present. Instead of oral antibiotics, patients may require intravenous (IV) antibiotics. Carbapenems, such as Meropenem and Ertapenem, are considered first-line treatments for ESBLs. The IDSA does not provide specific durations of therapy recommendations, but it is recommended that the duration of therapy not differ from that of UTIs without resistant bacteria. Nitrofurantoin and Fosfomycin

are oral options that retain some activity against certain ESBLs but should be used cautiously, given the resistance rates.

For VRE treatment, Ampicillin is a possible IV option if the minimum inhibitory concentration (MIC) is sufficient, as Ampicillin concentrates in the urine. Monitor creatinine for dosing adjustments. Linezolid (Zyvox) is both an oral and IV option and is primarily excreted unchanged in the urine. Close monitoring of platelet counts is necessary with Linezolid due to the potential for bone marrow suppression. Thrombocytopenia is usually observed with treatment exceeding two weeks or in patients with underlying conditions that predispose them to myelosuppression. It is generally reversible, with platelet counts returning to normal typically within seven days. Daptomycin (Cubicin) is another IV option. It requires Creatine Kinase monitoring, and statins should be avoided for the duration of treatment. of discontinuing.

Infections with resistant organisms are associated with

higher mortality rates, increased hospital expenses, length of stay, and reduced clinical response rates. The inappropriate use of antibiotics for UTIs is a significant issue contributing to antibiotic resistance and warrants addressing.

References:

Infectious Diseases Society of America. (2018). Clinical practice guideline for the management of uncomplicated urinary tract infections in adults: 2018 update. *Clinical Infectious Diseases*, 67(7), e1–e7.

Centers for Disease Control and Prevention. (2019). Antibiotic resistance threats in the United States, 2019. <https://www.cdc.gov/drugresistance/pdf/threats-rep>



Photo Credit: submitted by author

Matt Gatlin PhD, FNP, COI

Matt Gatlin has been involved in various areas of healthcare for 27 years and is a Family Nurse Practitioner working at Memorial Hospital Gulfport. His current practice and research interests are Infectious Diseases and nursing education. He is also a graduate-level nursing instructor and serves as a peer reviewer for The Nurse Practitioner, a Wolters Kluwer publication. He is an active member of MS Association of Nurse Practitioners and a frequent author for Advancing Practice publications.

SPF Rx Healthcare Provider Survey - Wave 2

https://www.surveymonkey.com/r/SPFRx_Healthcare_Provider_Survey_Wave2



UPDATE

Wanda Stroupe, DNP, FNP-BC

Billing with G-Codes

Effective January 1, 2024, Centers for Medicare and Medicaid Services (CMS) will pay for add-on healthcare common procedure coding system (HCPCS) code G2211. CMS.gov's (2023) website reports that G2211 is an add-on code to an office or other outpatient service evaluation and management (E/M) codes [99202-99215]. The G2211 code recognizes the resource costs associated with evaluation and management visits for primary care and longitudinal care. The 2024 Medicare reimbursement allowed is \$16.05. Providers who do not intend to have an ongoing longitudinal relationship with the patient (e.g., urgent care, consultants, second opinions, etc.) should not bill G2211.

Do NOT use the G2211 code when the office visit E/M code is reported with modifier 25 appended. Be sure your electronic health and billing record systems are updated to the 2024 fee schedule. Per MLN Matters Article [MM13272](#), CMS will deny payment for code G2211 on the same date of service as an E/M visit (codes 99202-99205, 99211-99215) reported with modifier 25, for the same patient by the same provider. Add-on code G2211 may be billed with telehealth services. CMS advises they pay for G2211 using the Physician Fee Schedule, and patient coinsurance and deductible applies (CMS, 2024).

Wanda Stroupe, DNP, FNP-BC

Wanda Stroupe is a 2013 graduate of the Mississippi University for Women's DNP program and a 2003 graduate of their Master's Family Nurse Practitioner program. She is the owner/President of the Family Care Clinic of Ripley. She has served as MANP Director since 2017. Wanda is a member of the local Rotary Club and serves as voluntary Director of Medical Services for My Choices pregnancy testing center. She serves on the North Mississippi Health Services are Clinically Integrated and ACO Board. She is on the CIN Payer Committee and the Primary Care Collaborative Committees. Wanda is the recipient of the AANP 2021 Mississippi Nurse Practitioner Advocacy Award for Excellence and the 2022 RISE Award presented by Empower MS. She is an Ambassador for Empower MS. Wanda is the current Vice President for MS Association of Nurse Practitioners and will assume the presidency position in January of 2025.



CMS does not identify a quantity limit on the use of G2211; however, be cautious with repeated uses and meet all criteria for the base E/M for use with this code.

Auditors will look for E/M medical necessity, accuracy of the documentation, and make sure you are clear on whether you are basing the code on medical decision-making or time. Also, auditors will look for substantiation of the long-term relationship with the patient and your management of the chronic conditions. They will review overall claims data, the diagnosis for the visit, and the diagnosis for which the G2211 code is applied. They will look at the assessment and plan of care as well as other service codes billed at the same time. Also, remember billing G2211 with a modifier 25 will result in automatic rejection and denial of the entire claim.

Multiple providers may utilize the G2211 code for the same patient depending on their long-term relationship with the patient and their oversight for the condition in which it is appended. An example might be where the code is utilized by a cardiologist managing chronic cardiac condition(s), a pulmonologist managing lung condition(s) like COPD while you, as the primary care provider, may be managing the patient's diabetes or other chronic conditions.

G0136: The Centers for Medicare & Medicaid Services estimates that approximately 50% of an individual's health is directly related to social determinants of health (SDOH). CMS (MLN9201074, January 2024), defines G0136 as "the Administration of a standardized, evidence-based SDOH assessment, 5–15 minutes, not more often than every 6 months."

You may provide this service with:

- An evaluation and management (E/M) visit, which can include hospital discharge or transitional care management services
 - Behavioral health office visits, such as psychiatric diagnostic evaluation and health behavior assessment and intervention
 - The Annual Wellness Visit (AWV)
- Additionally, CMS states, "SDOH risk assessments that you furnish as part of an E/M or behavioral health visit isn't a screening. It may be medically reasonable and necessary as part of a comprehensive social history when you have reason to believe there are unmet SDOH needs that are interfering with the practitioner's diagnosis and treatment of a condition or illness or will influence the choice of treatment plan or plan of care. Patient cost sharing will apply, just as it does for any medical service. The risk assessment wouldn't usually be administered in advance of the visit.

You may choose a tool or ask additional questions that also include other areas if prevalent or culturally important to your patient population.

Some tools you may consider that are standardized and evidence-based include the [CMS Accountable Health Communities Tool, Protocol for Responding to & Assessing Patients' Assets, Risks & Experiences \(PRAPARE\)](#), and [instruments identified](#) for Medicare Advantage Special Needs Population Health Risk Assessment, (MLN9201074 January 2024). [Social Determinants of Health \(SDOH\) Data with ICD-10-CM- Z Codes](#)

- Not a screening service but an assessment tool (not to be done on all Medicare patients as screening)
- Triggered by the provider believing the patient has SDOH needs that are interfering with the diagnosis or treatment of a condition
- Can be done on the day of an E/M service (office visit) excluding 99211 (nurse visit)
- May be done at Medicare annual wellness visit (initial or subsequent but not Welcome to Medicare)
- No cost to the patient if done at the Medicare annual wellness visit
- May be completed at hospital discharge visits, however, CMS expects follow-up visits (outpatient or TCM) to try and meet identified SDOH needs
- Must document the SDOH needs in the record; diagnosis codes for these are in ICD-10 categories Z55-Z65 (include in top 12 visit diagnoses so they reach the payer).

Further information can be found on pages 5 and 6 of MLN booklet. <https://www.cms.gov/files/document/mln9201074-health-equity-services-2024-physician-fee-schedule-final-rule.pdf-0>

G0447: Obesity Behavioral Therapy Counseling – Face-to-face behavioral counseling for obesity 15 minutes. Frequency: Up to 22 visits in a 12 month period.

First Month: 1 face-to-face visit every week.

Months 2-6: 1 face-to-face visit every other week

Months 7-12: 1 face-to-face visit every month if patient meets criteria.

Cover patients with Obesity (BMI greater than or equal to 30 kg per meter squared)

Proper documentation is important when billing for this code. Documentation should look similar to

"15 minutes spent with patient discussing lifestyle modifications and diet to affect weight loss. Discussed healthy diet as well as low-fat, low-cholesterol diet. Reviewed Plant Based diet with the patient. Discussed exercise options with attention to the patient's abilities. Encourage walking at least 45 minutes 5 days a week if physically able. Reviewed healthy options with less sugars and carbohydrates. Encouraged smaller meals at evening meal. All questions answered to patient's satisfaction today."

Further information, including policy for use of G0447, can be found at : <https://www.cms.gov/Regulations-and-Guidance/Guidance/Transmittals/Downloads/R142NCD.pdf>

References

Centers for Medicare & Medicaid Services,(2023). Retrieved from: <https://www.cms.gov/newsroom/fact-sheets/calendar-year-cy-2024-medicare-physician-fee-schedule-final-rule>

Centers for Medicare & Medicaid Services, (January 18, 2024) CMS Medicare Learning Network MLN Matters Number: MM13473, How to Use the Office & Outpatient Evaluation and Management Visit Complexity Add-on Code G2211. Retrieved from: <https://www.cms.gov/files/document/mlm13473-how-use-office-and-outpatient-evaluation-and-management-visit-complexity-add-code-g2211.pdf>

CMS, Health Equity Services in the 2024 Physician Fee Schedule Final Rule, MLN9201074, January 2024. Retrieved from: <https://www.cms.gov/files/document/mln9201074-health-equity-services-2024-physician-fee-schedule-final-rule.pdf-0>

CMS.gov, Improving the Collection of Social Determinants Of Health (SDOH) Data with ICD-10-CM Z Codes.(N.D.). Retrieved from: <https://www.cms.gov/files/document/cms-2023-omh-z-code-resource.pdf>

Blood Lead Screening

Prevention Clinical Evaluation Management Reporting

Information provided by MSDH

Revised Blood Lead Screening and Health Homes Summary

Crystal Veazy, Program Director with the Mississippi State Department of Health (MSDH) Lead Poisoning Prevention and Healthy Homes Program asked MS Association of Nurse Practitioners to share updated information regarding Lead Poisoning Screening.

Reporting Requirements:

According to the Mississippi State Department of Health (MSDH) List of Reportable Diseases and Conditions, Blood Lead Poisoning is considered a Class II and Class III reportable disease.

- **Class II** requires that all venous elevated blood lead levels $\geq 3.5\mu\text{g}/\text{dL}$ in patients less than or equal to six years of age must be reported to the Mississippi State Department of Health Lead Poisoning Prevention and Healthy Homes Program
- **Class III**, for laboratory based surveillance (also includes ESA Leadcare Providers), requires that ALL blood lead level results in patients less than or equal to 6 years of age must be reported to the Mississippi State Department of Health Lead Poisoning Prevention and Healthy Homes Program.

Please see the MSDH website for a copy of the MSDH List of Reportable Diseases and Conditions/ Report of Lead Level Form.

<https://msdh.ms.gov/msdhsite/static/44,0,360.html>

Providers must complete and submit this form on a weekly or monthly basis to the Mississippi State Department of Health (MSDH) Lead Poisoning Prevention and Healthy Homes Program by either fax, email, or mail; Fax: 601-576-7498, Email: Crystal.veazey@msdh.ms.gov or Mail: Mississippi State Department of Health Lead Poisoning Prevention and Healthy Homes Program 570 E Woodrow Wilson • Osborne 200 • Jackson, Mississippi 39215

[Quick Guide for Lead Poisoning Prevention, Clinical Evaluation and Management](#)

[Blood Lead Screening and Healthy Homes Screening Summary](#)

Screen all children between the ages of 6 and 72 months at each well-child visit using the [Blood Lead Screening and Healthy Homes Summary](#)

Signs or Symptoms of Possible Lead Poisoning:

- Irritability
- Frequent tiredness
- Behavioral problems
- Stunted growth
- Learning problems
- Hyperactivity
- Decreased appetite
- Developmental delay
- Hearing loss
- Convulsions, coma, and death can occur at very high levels, which are extremely rare

DO SOMETHING TODAY THAT
YOUR FUTURE SELF WILL THANK
YOU FOR.

Join us today & make your voice heard.

*Our actions and decisions today will shape
the way we will be living in the future.*



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TALK TO US ABOUT HOW

601-407-3226
msanp@msanp.org



[PAD Screening Questionnaire](#)

[Advanced Vascular & Vein Associates
Patient Referral Form](#)

4436 Mangum Drive, Flowood, MS 39232
601-586-7070 (Office)
601-586-7071 (Fax)

MS Association of Nurse Practitioners' key initiatives include

- We advocate for NPs with policymakers, and other healthcare entities both in the state and nationally
- Full Practice Authority allows NPs to practice to the fullest extent of their education and training *without* expanding their respective scopes of practice
- Increase access to care for patients across Mississippi
- NP orders for durable medical equipment and devices
- NP signature recognition on legal documents and eliminating co-signatures by physicians
- NP Income tax incentives & exemptions for underserved practice areas & NP owned businesses
- NP reimbursements and inclusion in insurance networks
- Recognize NPs as primary care providers (PCP)
- Increased faculty salaries

Recognize the Signs of Laryngeal Cancer

Laryngeal cancer symptoms often present similar to that of the common cold. Take our **FREE ONLINE CME** and learn to recognize early signs of laryngeal and other head and neck cancers.



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