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Submit articles for publication in the Winter Edition of Pharmascript by December 15, 2020

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## **ASHP Diversity, Equity, & Inclusion Task Force**

Joshua Blackwell, PharmD, MS

MSHP Legislative Affairs Committee – Chair

The American Society of Health-System Pharmacy (ASHP) Diversity, Equity, and Inclusion (DEI) Task Force was formed in June 2020 with the purpose of providing recommendations to the ASHP Board of Directors and Leadership on specific and actionable steps to address matters of racial diversity, equity, and inclusion. The task force was formed in response to the recent tragedies facing Black Americans including the tragic deaths of George Floyd, Ahmaud Arbery, and Breonna Taylor. The membership of this body consists of a Board-appointed group of primarily Black members of ASHP and includes a liaison member from the ASHP Board, ASHP Foundation Board, as well as both the ASHP President and the ASHP Chief Executive Officer.

The task force conducted their first meeting on August 24<sup>th</sup> in which members shared ideas and perspectives on goals to pursue over the coming weeks as a collective group. As ASHP had formed an ad-hoc group in 2003 with the same intentions as the current task force, members of the task force expressed concern on continuity of initiatives as it relates to diversity, equity, and inclusion. The collective discussed the importance of ASHP having a consistent focus on these matters. Since this problem has evolved over several decades, it will take time to bring about the needed change, not only in our profession, but also our society. Based upon discussions and ASHP Board of Directors' consideration, the task force members were placed in subcommittees in order to create recommendations on the following:

1. Governance and committees – Members will have concentrated discussions on the makeup of the ASHP and ASHP Foundation, Board of Directors, councils, sections and forums, House of Delegates, Committees on Nominations, and ASHP advisory bodies.
2. Education, training, research, and publications – This subcommittee will focus on education and training as it relates to residency program recruitment, research being a true representation of patient populations, and publications centered around health disparities or DEI topics.
3. Advocacy, marketing, and communications – This subcommittee will focus on advocating for legislation regarding health disparities, concerns impacting underserved communities, and marketing and communications showcasing opportunities for minorities to consider ASHP as their professional home.

The subcommittees continued to meet during the month of September to finalize their recommendations on their respective areas of focus in preparation for larger discussion to commence in October 2020. Based upon the meeting in October, the task force will continue to finalize their recommendations to provide to the ASHP Board of Directors to consider in January 2021. Overall, the work within the task force has shown several opportunities for ASHP to improve diversity, equity, and inclusion efforts and be a national example for our profession to follow in the months and years to come.



## ASHP 2020 House of Delegates

Kristin Watson, PharmD, BCCP

This year's ASHP Regional Delegate Conferences and June House of Delegates were held virtually for the first time. Delegates shared their voices and those of their constituents via a web-based meeting platform, and as always, spirited discussions on proposed policies occurred.

Numerous policies were approved by the 2020 ASHP House of Delegates.<sup>1</sup> Three of these were developed as a result of the Joint Council session on Violence and Firearm-Related Injury and Death that was held during ASHP 2019 Policy Week. These include the *Role of the Pharmacy Workforce in Violence Prevention*, *Role of the Pharmacy Workforce in Preventing Accidental and Intentional Firearm Injury and Death*, and *Role of the Pharmacy Workforce in Identifying and Caring for Victims of Human Trafficking*. The *Residency Training for Pharmacists Who Provide Direct Patient Care* policy supports the position that new pharmacy graduates who will provide direct patient care be required to complete an ASHP-accredited postgraduate year one residency. A complete list of the approved policies and the associated rationale can be found at: <https://bit.ly/33vVIHh>. A Statement on *Use of Artificial Intelligence in Pharmacy* was also approved.<sup>2</sup>

Thank you to Drs. Tara Feller and Molly Wascher who are completing their delegate term this year. In 2021, your delegates will be Drs. Joshua Blackwell, Nicole Kiehle, Janet Lee, and Kristin Watson. Interested in serving as a delegate? Reach out to one of these individuals to learn more about the election process and their roles and responsibilities.

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1. ASHP House of Delegates. Policies Approved by the 2020 ASHP House of Delegates. Available at: <https://www.ashp.org/-/media/DAF711CCD0814F1C9AAE176974228093.ashx> Accessed September 14, 2020.
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## Pharmacy Online Learning in the COVID-19 Era

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Let's rewind to March 2020. As the cold weather was transforming into warmer days, a global pandemic was among us. Almost instantaneously, many aspects of education changed. Most programs went entirely online, and we were left with the daunting task of learning how to flourish in a brand new environment. Online learning has been on the rise in the United States for the last two decades, partly due to increasing financial concerns faced by colleges and universities.<sup>1</sup> The COVID-19 pandemic is a catalyst in this rise, and it is likely that we will see online learning exponentially rise over the next few years.<sup>2</sup>

While online learning has become increasingly popular over the last decade, there is still much research to be done. There are challenges associated with online learning that exist for both faculty and students. The literature shows that some of the major challenges for students include having unrealistic expectations from the faculty, lack of learner readiness, and learners feeling disconnected from the educational environment.<sup>1</sup>

Some of the challenges from the faculty side include lack of adequate training for the online environment, lack of incentives to create new content, and the change in the faculty member's role in becoming more student-centered. Based on the literature, it is evident that there are changes that must occur to improve both the faculty and student experience in the online learning environment.

I experienced first-hand the challenges experienced by faculty while on my fourth-year pharmacy school teaching elective rotation. I was a teaching assistant for the entirety of my third year of pharmacy school, but even that did not prepare me entirely for the virtual teaching environment. I primarily focused on teaching lab for the first-year pharmacy students. I was teaching between three to six students at one time. As I introduced myself to the students on the first day of lab, I couldn't help but feel nostalgic as I was in their shoes just three years ago. While some students were fumbling around and trying to learn to use Zoom, others stared at me blankly until I began teaching. I found out quickly that many of the students did not have any prior pharmacy experience, meaning that it was their first time counseling about medications or learning about how to verify prescriptions. They were shy and many were afraid about saying the wrong answer; this made them less likely to volunteer to speak. After the first week of lab, I gathered from the students that they were overwhelmed and wished that they were in live classes so they could meet their classmates for the first time. This touches on one of the challenges discussed in the literature, which is feeling isolated from school. In an effort to tackle this challenge, I conducted a small activity with the students in the following week to help them feel connected to each other.

The second week of lab had some significant improvements from the first week. For starters, I was able to engage the group more than the previous week. Each student talked about one fun thing they had done over the weekend, even if it was as simple as having a good cup of coffee. This activity managed to garner student engagement, and the students ended up talking to each other about fun things they were doing on the weekend. Having a support system in pharmacy school is crucial, and I was happy that they were starting to build that with their classmates. During the second week, I saw that the students were much more likely to participate in the group discussions and offer feedback to their colleagues. They seemed less stressed than they did during the first week, which was a strong improvement. By the end of this week, more students were starting to get used to the virtual environment. This ties into the learner readiness challenge discussed in the literature, because more students were now willing to learn how to thrive in the virtual environment. This was a shift from the first week, where some students felt that they could not adapt to the new way of learning.

I continued to see vast improvements in the first-year students through the next few weeks. They had a better grasp of the material learned, increased confidence, and were more willing to ask questions. It was a humbling experience to see this growth, and it felt like my education had come full circle from my first year of pharmacy school.

I recognize how much I have learned while teaching over the last few weeks but also realize how much more needs to be done to improve the virtual learning environment. I have a newfound sense of respect and gratitude to the faculty members who have worked to make the virtual environment engaging and conducive to learning. It takes a great deal of effort and time to effectively teach online, and I know that I am only at the tip of the iceberg. As I move onto my next rotation and towards graduation, I will remember the valuable lessons learned and hope to be able to apply them in my future career as a pharmacist.

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## Managing Dye Allergies: Concepts and Complications

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Dyes may be categorized according to color or source (i.e., natural versus synthetic). Most dyes used today are synthetic.<sup>1,2</sup> Adverse reactions to food colorants are both IgE and non-IgE-mediated. Clinically relevant IgE production has been shown with some natural additives, although most synthetic additives are simple chemicals that most likely act as haptens. These haptens bind with protein to induce an IgE-mediated response. Both IgE and non-IgE responses involve activation of the immune system, leading to histamine release and increased leukotriene production. Artificial food colorants may cause adverse reactions, but do not contain protein; true allergies are rare. Natural dyes including carmine, annatto, and saffron can cause IgE-mediated hypersensitivity reactions. Carmine is a red dye extracted from dried cochineal insects. Over 30 reported cases of IgE-mediated hypersensitivity reactions because of carmine red have been reported, most with anaphylactic reactions, and several reports of delayed hypersensitivity reactions. Annatto, a yellowish orange pigment extracted from the seeds of *Bixa orellana*, has reported cases of urticaria and anaphylaxis.<sup>1,2</sup>

Dye allergies are rare in the general population but higher in atopic individuals. Clinical manifestations are usually mild and rarely anaphylactic. The prevalence of allergic reactions to food dyes is not known but considered to be low. There is a discrepancy between the perception of patients and parents (7.4%) and the reported prevalence of adverse reactions to additives (0.01–0.23%); the reported prevalence is higher in atopic individuals (2–7%).<sup>1</sup>

Managing allergies from inactive ingredients, including dyes, has been a considerably difficult issue to resolve. Alerts for inactive ingredients may not fire upon order entry or pharmacist order verification. Electronic health records may be unable to determine the inactive ingredients contained in a specific dispensed medication National Drug Code. If inactive ingredient alerts were turned on, they may not fire correctly (i.e., false positives and/or false negatives).

There is an opportunity to develop best practices for addressing and handling dye allergies to improve medication and patient safety.

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## **New Pharmacy Technician Roles at the University of Maryland Medical Center**

Janelle Lowery, CPhT and Sandra Sweet, CPhT

At the University of Maryland Medical Center (UMMC) we have been blessed with a dedicated group of pharmacy technicians who work together to achieve the best possible results. Their day-to-day tasks ensure timely patient care and medication services. We are always striving to provide growth opportunities and engage pharmacy staff in more advanced roles within the department and the hospital. Promoting pharmacy technicians from within helps solidify our mission of providing excellence in the education and training of pharmacy professionals. Pharmacy Lead Technician for Compliance and Pharmacy Triage Technician are two new pharmacy technician roles at UMMC.

Pharmacy Lead Technician for Compliance, Sandra Sweet:

“Pharmacy departments in hospitals are regulated intensely by multiple bodies, such as the Joint Commission, Centers for Medicare and Medicaid Services, and Board of Pharmacy, among others. At the University of Maryland Medical Center, we have several onsite and offsite pharmacy satellites. Our pharmacy established a new technician role dedicated to compliance with United States Pharmacopeia (USP) standards and our governing regulatory bodies. While functioning as one pharmacy department, each satellite is serving a unique patient population, and therefore has their own special needs to support daily operations. With the pending changes to USP <795> and <797> standards and the addition of USP <800>, we are tasked with ensuring that each satellite pharmacy is compliant with current standards and will be compliant when the new USP standards are released.

Currently, a large focus of my day-to-day tasks involve preparation for the release of the new USP standards. This includes reviewing policies and procedures pertinent to USP <795>, USP <797>, and USP <800> to ensure our training and monitoring programs are compliant and meaningful. We have developed a new training and monitoring program in line with the proposed USP <797>. I have become involved in the initial training and sterility testing for technicians, training staff in our sterile and non-sterile compounding satellites, and working with the satellite managers to update policies and procedures. I am also responsible for the required annual sterility testing of our pharmacists. For ongoing pharmacy compliance, I conduct satellite inspections to help identify any needs and work with the managers and lead technicians to help them meet those needs. I also assist with operations and the planning and implementation of medication safety projects. As with all things healthcare-related, I’m sure my role as compliance technician will always be evolving!”

Pharmacy Triage Technician, Janelle Lowery:

“At the beginning of the year, UMMC launched a new position overseeing the medication distribution process, the Triage Technician. Working as a Triage Technician is almost identical to working as an air traffic controller in a control tower. Triage Technicians respond to medication requests from nurses, assist with medication distribution and allocation, monitor inventory, and prepare critical reports, all while providing frontline customer service. Like an air traffic controller, our top priority is safety. As air traffic controllers direct aircrafts efficiently to minimize delays, we direct medication doses in the same fashion, ensuring they are making it to the patients in a timely manner. A big part of my role involves detailed communication with both nursing and pharmacy staff to ensure patients receive their medications. Air traffic controllers use radios to communicate

with pilots. We use Epic and Doc Halo to communicate with pharmacists and providers, as needed. By optimizing technology to communicate in real time, my team can minimize immediate interruptions, such as phone calls, while permitting more focused, detailed work.

From March to May 2020, I have responded to a total of 19,105 medication message requests by nursing, averaging over 6,300 requests per month. I have responded to countless phone requests, assisted with preparation and distribution of critical IV infusions, and ensured medications are delivered efficiently. Having a dedicated triage technician helps with the continuity of care and handoffs among pharmacy staff. There are so many things I love about this role, including assisting with the care for our patients and helping to bridge the gap between nursing staff and pharmacy. Similar to the air traffic controller, I really enjoy tracking our team's daily progress using multiple technologies. On a daily basis, we get to discover progressive methods to advance pharmacy services. So, the next time you board an aircraft, remember the air traffic controller stationed in the tower - that air traffic controller is me stationed in a pharmacy."

## **De-escalation of Opioid Therapy in Patients with Chronic Non-Cancer Pain**

Abraham Wardak, PharmD Candidate, University of Maryland School of Pharmacy; L. Diana Ardeljan, PharmD, BCPS, University of Maryland Medical Center

### **Introduction**

For decades, prescription opioids have been the standard of care for the treatment of chronic non-cancer pain (CNCP). These agents were the preferred choice due to their ability to block the mu, kappa, and delta receptors, making them effective at reducing both nociceptive and neuropathic pain. However, in the wake of the opioid epidemic, our society has become aware of the possible detrimental effects of opioid use: addiction, overdose, and death.<sup>1,2</sup> In response to the opioid epidemic, there has been a surge of cases where opioid-dependent patients have had their medications discontinued or rapidly decreased. The U.S. Food and Drug Administration has urged healthcare professionals not to abruptly discontinue opioids due to risk of withdrawal symptoms, uncontrolled pain, psychological distress, and suicide.<sup>3</sup> There are numerous practice and policy strategies that can be implemented to combat the rise in opioid-related harms including the safe tapering of long-term opioid therapy in patients with CNCP. The purpose of this paper is to highlight the information and recommendations found in existing literature to determine when opioid de-escalation therapy is warranted and how it can be performed safely in the outpatient setting.

### **When to Consider Opioid Tapering**

Healthcare providers are expected to routinely monitor the safety and efficacy of opioid therapy in patients suffering from CNCP. The 2016 Centers for Disease Control (CDC) Guidelines for Prescribing Opioids for Chronic Pain state the indications that warrant clinicians to either reduce opioid therapy via tapering or to discontinue opioid therapy via tapering.<sup>4</sup> Tapering should be considered in patients that request a reduction in

opioid doses or when opioid therapy fails to achieve clinically meaningful improvements in the patient's pain level or function, especially if the patient is receiving more than 50 morphine milligram equivalents (MMEs) per day. Additionally, tapering should be considered in patients that are non-adherent to the treatment plan or display unsafe behaviors such as early refills, frequent reporting of lost or stolen prescriptions, or borrowing opioids.<sup>5</sup> Providers should always use clinical judgment to differentiate between prescription opioid aberrant behavior and pseudoaddiction, which is caused by the under-treatment of pain. Lastly, clinicians should consider tapering when a patient experiences unmanageable adverse effects (e.g., drowsiness, constipation, cognitive impairment) or an overdose.

## How to Approach Opioid Tapering

The first and most critical step of opioid tapering is to have a supportive and shared decision-making discussion with the patient. Evidence has shown that patient involvement in decision-making increases the likelihood of a successful taper.<sup>7</sup> During this decision-making meeting, the patient should be informed of why their current opioid regimen is detrimental to their health and how they could benefit from opioid de-escalation. It is important for providers to appreciate their patient's concerns about proceeding with de-escalation therapy since patients may be reluctant due to the concern of worsening pain and function and of the possibility of developing withdrawal symptoms. During this step, providers should assure patients they will be present during each step of the taper to provide both emotional and physical support.

Once the decision to taper has been accepted by both the provider and the patient, a specific tapering strategy should be created. As of now, there are a limited number of formal guidelines and literature on opioid tapering. Clinicians can refer to recommendations from the CDC, the Mayo Clinic, and the Department of Veterans Affairs (VA). The 2016 CDC guidelines advise clinicians to decrease the opioid dose 10% each month for patients that were receiving opioids for a longer period of time (> 1 year) or to decrease by 10% each week for patients that were receiving opioids for a shorter period of time (< 1 year).<sup>4</sup> In addition to the CDC guidelines, providers can refer to resources made available by reputable clinical institutions. According to their research, the Mayo Clinic recommends a decrease of 10% of the original opioid dose every 5 to 7 days until 30% of the original dose is reached, followed by a weekly decrease of 10% of the remaining dose. The Mayo Clinic reports that this strategy reduces the risk of withdrawal symptoms and promotes adherence.<sup>8</sup> Additionally, the VA recommends a reduction of 5-20% percent every 1-4 weeks; however, a reduction of 2-10% every 4-8 weeks can be considered for patients taking high doses of long-acting opioids.<sup>5</sup> In patients that are concurrently using both long-acting and short-acting opioids, consider the patient's medical history, mental health diagnoses, and patient preference when deciding which formulation should be tapered first. The CDC recommends allowing patients to choose which formulation, either short-acting or long-acting, is tapered first.<sup>6</sup> Lastly, a gradual approach of a 5% reduction per week should be used in patients that were receiving more than 90 MMEs per day with concomitant mental health disorders such as depression, anxiety, or post-traumatic stress disorder.<sup>7</sup>



The success of tapering opioids is heavily dependent on the provider's involvement during the process. Providers should routinely assess their patient's pain with tools such as the three-item "Pain average, interference with Enjoyment of life, and interference with General activity" (PEG) Assessment Scale or the Quality of Life Scale by the American Chronic Pain Association.<sup>4</sup> Unfortunately, physically dependent patients undergoing opioid tapering may experience withdrawal symptoms such as anxiety, epiphora, diarrhea, vomiting, restlessness, and diaphoresis. Withdrawal symptoms can present 8-24 hours after the last opioid dose and may last weeks if untreated. To minimize withdrawal symptoms, clinicians may choose to slow down or pause the tapering regimen.<sup>4</sup> Patients should be counseled on increased risk of overdose if they abruptly return to previous opioid doses after tapering.<sup>6</sup> Patients with CNCP that are undergoing opioid tapering should receive appropriate non-opioid pharmacological therapy as well as non-pharmacological therapy in anticipation of worsened pain following tapering.<sup>9</sup> Providers can use alpha-2 adrenergic agonists, antiemetics, antidiarrheal agents, muscle relaxing agents, acetaminophen, or NSAIDs to provide relief from withdrawal symptoms.

## Conclusion

Appropriate de-escalation of opioid therapy in patients with CNCP is an effective method to reduce opioid-related harms such as serious adverse effects, overdose, and death. Clinicians can refer to the previously discussed literature to develop an adequate opioid tapering strategy. Pharmacists, particularly those in the ambulatory setting, have an opportunity to support providers and patients interested in opioid tapering. Strategies should be individualized in order to minimize symptoms of opioid withdrawal as well as maximize pain relief. One challenge associated with opioid de-escalation is the lack of formal guidelines. Fortunately, the American Academy of Pain Medicine is currently developing a consensus guideline on opioid discontinuation, which will further advance clinical practices in patients with CNCP.

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