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### **Thoughts from the Chair**

#### A TIME FOR HEALING.....

Message from the Chair Richard Artymowicz, Pharm.D., MBA, FCCP, BCPS

As I prepared to write my message to the PRN this year, I reflected upon Dr. Twilla's message in the 2021 Newsletter titled "A TIME FOR HOPE". In it, Jennifer speaks of the introduction of the Covid-19 vaccines as being a light in the darkness, providing hope that we could escape the despondency of the pandemic.

Looking back at the first months of 2021, I can say that I shared that feeling of hope Jennifer spoke of. There was great enthusiasm among healthcare workers and the public alike that the vaccines would represent the beginning of our journey back to normalcy. No one

was predicting the devastation that the Delta and Omnicron variants would bring, and the continued assault on the dedication and



fortitude of our healthcare workers and system. As 2021 marched on, burnout became the new buzzword, and while many opinions were formed on how to prevent and manage this in healthcare, outcomes studies are still sparse on what strategies are most effective, or effective at all. Still, we pressed on, managed boosters, monoclonals and oral antivirals, and continued to make a difference.

To me, perhaps the most surprising development was the erosion of confidence in the vaccines, especially among healthcare workers. The vaccination mandates from OSHA and CMS eventually led

to a divide between the many who couldn't wait for a booster, and those who didn't want a first, second, or third dose. Empathy for the latter position was low among many leaders, and most healthcare workers whose personal beliefs on vaccines differed from those of the government were threatened with losing their jobs if they didn't comply....some thanks for all the sacrifice many thought.

So, now as Omicron seems to be in the rearview mirror, mask mandates are lifting, and deadlines for vaccine booster compliance are being extended, I propose that now is the time for healing. Anthon St. Maarten offers "The wounded mind must be reset like a fractured bone. It cannot heal itself without spiritual realignment" and Neale Donald Walsch states that "pain results from judgement....remove the judgement and the pain disappears".

So my hope now is that those of us who remain in healthcare, and the public at large can let go of any judgments we've made, and allow the tattered minds of so many healthcare workers to realign with our core mission, which is to help people and thrive while we do it. It won't be easy, but hey, we're pretty used to not easy...and it never seems to stop us!

In this theme of healing, the CADM PRN has an exciting PRN session planned for the 2022 annual meeting that will provide tools for us to bolster our teams through recruiting, training, and succession planning. The Student/Resident committee is planning a wonderful seminar to provide a forum for our protegees to pose questions to experts about how to best search for and select that first job. Our Nominations, Communications, and **Education/Research Committee** chairs are also working to bring us opportunities and content that will help in our journey to heal.

I look forward to seeing as many of you as possible in San Francisco this October, and most importantly, I thank you for this opportunity to serve.

### **Committee Chairs**

## Richard J. Artymowicz, Pharm.D., MBA, FCCP, BCPS, Chair CADM

Rich Artymowicz received his BS in Pharmacy Degree from the Philadelphia College of Pharmacy and Science in 1991. He then completed his Doctor of Pharmacy degree at the Medical University of South Carolina in 1993. He then served a PGY-1 (Pharmacy Practice) Residency at the Memorial Hospital at Easton, Maryland. Rich rounded out his formal education with an MBA from Rutgers in 2014. Following Residency, Rich accepted a position as the first Pharmacy Clinical Coordinator at Burdette Tomlin Memorial Hospital (later renamed Cape Regional Medical Center). The position appealed to him because this community hospital held many similarities to the institution where he served his residency, and he saw the opportunity to launch pharmacist managed pharmacotherapy protocols as a cornerstone of the clinical pharmacy services. During his time as Clinical Coordinator, Rich was able to work with the rest of the pharmacy team to introduce heparin, warfarin, TPN, and many antibiotic

management protocols. In addition, Pharm.D. students were accepted on rotation, and many posters and a few publications were generated. In 2006, Rich was promoted to Director of Pharmacy Services. He, along with his clinical coordinators, continued to grow the Clinical Pharmacy services by adding technician driven medication history services, antimicrobial stewardship, an, outpatient AC clinic, a PGY-1 Residency Program, and a transitions of care service. In 2013. Rich was given responsibility for the Sleep Center, and the Respiratory/Cardiac Service Line. In 2015, the Wound Center was added as another area of responsibility. Rich has served on several ACCP committees, was elected as a Fellow in 2003, and has been an invited speaker at the ACCP Annual Meeting on two occasions.

#### Nitish Bangalore, CADM Chair-Elect 2021-2022

Nitish is currently a Pharmacy
Operations Manager at Children's
Wisconsin in Milwaukee. He
previously was Director of Pharmacy
at Holy Family Memorial in
Manitowoc, WI, Pharmacy Manager
at Froedtert West Bend Hospital,

Pharmacy Clinical Supervisor/PGY-1 Pharmacy Residency Program Director at Wheaton Franciscan-St. Joseph, and Pharmacy Education/Investigational Drug Specialist at Aurora St. Luke's Medical Center. He completed a **PGY-1 Pharmacy Practice** Residency at United Hospital/Children's Hospital, St. Paul, MN and graduated from the University of Illinois-Chicago with a PharmD. Nitish previously served the Clinical Administration PRN as Secretary-Treasurer 2018-2019 and as Chair of the Education and Research Committee 2015-2018. He has served on several committees and councils with the American Society of Health-Systems Pharmacists and Pharmacy Society of Wisconsin.

# Adriane Irwin, MS, Pharm.D., BCACP, CDCES, Secretary and Treasurer, CADM

Adriane Irwin is Chair and an Associate Professor (Clinical) in the Department of Pharmacy Practice at the Oregon State University College of Pharmacy. Her clinical practice site is with Salem Health Hospitals & Clinics, where she provides project management and data analytic

support to department initiatives focused on quality and medication safety.

Outside of her clinical practice site, Dr. Irwin maintains an active research program focused on safe practices for opioid prescribing. Her work is funded by multiple organizations, and she has contributed over 40 publications to the peer-reviewed literature. She is also the pharmacist representative to Oregon Health Authority's Heath Evidence Review Commission, a panel that prioritizes spending for the state's Medicaid program using evidence-based practices.

#### Mary Temple-Cooper, MS, PharmD, BCPS, FCCP. Chair-Communications Committee

Mary is currently a Clinical Manager for Hillcrest, Cleveland Clinic in Mayfield Heights, Ohio. Previously she was a Clinical Specialist for Neonatal, Pediatric and Obstetric Medicine and Residency Program Director for the PGY1 for 14 years. She graduated from The Ohio State University with her Bachelor of Science in Pharmacy, from SUNY Buffalo with her Doctor of Pharmacy, from University of Florida with her

Master of Science in Pharmacy Administration and Outcomes Research. She completed a fellowship at The Ohio State University in Pediatrics and Infectious Disease and a residency at William Beaumont Hospital in Royal Oak Michigan. She has chaired the Health Outcomes committee for the Women's PRN and has chaired the Communications Committee for the Women's PRN. She has served on several committees through American Society of Health-Systems Pharmacists and the Ohio Society of Health System Pharmacists. Outside of Pharmacy, she enjoys going to Steeler's Football games, travelling, or being outdoors and spending time with her family.

#### Kelly Bobo, Pharm.D., MBA, BCPS, BCPPS – Chair, Education and Research Committee

Dr. Kelly Bobo received her Bachelor of Science and Doctor of Pharmacy degrees from the University of South Carolina and a Master of Business Administration from the University of Memphis. She completed a residency in Pediatric Pharmacotherapy and Home Infusion Therapy at Le Bonheur

Children's Medical Center, the University of Tennessee Health Science Center, and PharmaThera. Inc. Dr. Bobo is board certified in Pharmacotherapy and Pediatric Pharmacotherapy. Currently, she is the Clinical Pharmacy Manager at Le Bonheur Children's Hospital. She has been involved in residency training since 2002 and has been a Residency Program Director since 2006. She is also an Assistant Professor at the University of Tennessee Health Science Center College of Pharmacy. Dr. Bobo is a past President and Treasurer of the Mid-South College of Clinical Pharmacy and a past chair of ACCP's Pediatric PRN. She is also active in the Pediatric Pharmacy Association and ASHP. Outside of work and professional activities, she enjoys reading and spending time with her family

# Jennifer Twilla, PharmD, BCPS, FCCP. Chair – Nominations Committee

Dr. Twilla received her Doctor of Pharmacy degree from the University of Tennessee in 2008. After pharmacy school, she completed a PGY1 Pharmacy Practice residency at the Veterans

Affairs Medical Center in Memphis, TN along with a PGY2 Internal Medicine Residency at Methodist University Hospital in Memphis, TN. In 2010, Dr. Twilla accepted a position at Methodist University Hospital as a Clinical Specialist in Internal Medicine. She practiced as a specialist until May 2018 and then became the Clinical Pharmacy Manager at Methodist University Hospital. Currently, she is the **Assistant Director of Clinical** Pharmacy Services for Methodist University Hospital. She served as the PGY1 Pharmacy Residency Program director from 2015-2021. Dr. Twilla has an appointment with the University of Tennessee Health Sciences Center as an Assistant Professor in the Department of Clinical Pharmacy. In 2018, she was inducted as a Fellow of the American College of Clinical Pharmacy. She is the past chair of the CADM PRN and is serving as the current chair for the Nominations committee.

#### Natalie Russell, PharmD, MBA, MSHA, BCPS Co-chair – Student & Resident Committee

Dr. Russell is the Pharmacy Program Director I of Supply Chain at Atrium Health Wake Forest

Baptist Health in Winston-Salem, NC. She received her PharmD from the University of Kentucky College of Pharmacy along with her MBA from the University of Kentucky Gatton College of Business in 2017. She completed her PGY1/PGY2 Health System Pharmacy Administration residency at VCU Health System and her MS in Health Administration from VCU College of Health Professions in 2019, Outside of pharmacy, her interests include watching sports, specifically the Kentucky Wildcats and Green Bay Packers, playing golf, and trying out new breweries.

#### Ashley F. Street, PharmD, MSHA, Co-chair – Student & Resident Committee

Dr. Street is the Assistant Director of Pharmacy for Adult Clinical Services & Education at WVU Medicine – WVU Hospitals in Morgantown, West Virginia. She oversees clinical pharmacy services for adults in the acute and ambulatory care setting, transitions of care services, and residency and student training programming for the department. Dr. Street received her Doctor of Pharmacy degree from Virginia Commonwealth University (VCU)

School of Pharmacy and her Master of Science in Health Administration from VCU College of Health Professions. She completed a twoyear PGY-1/PGY-2 Health System Pharmacy Administration Residency at VCU Health. Professional interests include health system integration and standardization, clinical pharmacy practice advancement, and leadership development. Dr. Street is actively involved in several professional organizations, including the American College of Clinical Pharmacy.

### **Sub Committee Updates**

#### **Communications Committee:**

The communications committee is led by Mary Temple-Cooper and is supported by members Adriane Irwin and Daniel Abazia. The communications committee will publish a Spring and Fall newsletter and will highlight some topics to assist members of the CADM. We will use Social media to announce big events.

If you are interested in stepping up to serve our PRN in a leadership

role, please do not hesitate to reach out. This is an excellent way to get involved and network with your fellow pharmacists. Please reach out with any questions to Mary Temple-Cooper at mtemple@ccf.org.

#### Upcoming dates:

 Fall newsletter submissions due by August 30,2022

### Education and Research Committee:

The Education and Research Committee is led by Kelly Bobo and Tamara Malm. Our committee members include Tom Achey, Edina Avdic, and Tanvi Patil. Jennifer Twilla serves as our PRN Leadership Liaison. Our current focus is completing the development of a Clinical Manager Toolkit that we hope will be useful to both new and experienced clinical managers. Several of the identified topics have been completed and we are collaborating with the Student and Resident Committee to identify residents who interested in contributing to some of the remaining topics. We also welcome participation from any PRN member who wants to get more involved.

Potential topics include: Performance Evaluations,
Expanding clinical service,
Optimizing clinical informatics, Best
practices for hiring and firing, Best
practices of managing a team, Staff
accountability Please email
kelly.bobo@lebonheur.org and
tmalm@usj.edu if you are interested
in this project!

#### **Nominations Committee Update:**

The Nominations Committee is led by Jennifer Twilla and comprised of Dawn Fuke, Tyler Vest, and Matthew Pitlick. This year, this committee will be focusing on identifying individuals for ACCP awards, developing the slate for PRN officers, and reviewing applications for the CADM Achievement Award and travel awards. We will also be assisting with helping implement the FIT/MERIT Sponsorship program for current CADM PRN members.

#### **Upcoming Dates:**

- March 2022 Call for nominations for CADM PRN officer slate
- September 2022—Annual meeting award applications due: Travel and CADM Achievement Award

If you are interested in stepping up to serve our PRN in a leadership role, please do not hesitate to reach out. This is an excellent way to give back to not only ACCP, but also the profession. Please reach out with any questions about the positions to Jennifer Twilla

at jennifer.twilla@mlh.org. Also, we are always on the lookout to help celebrate our CADM PRN members by nominating them for awards or offering support in any way we can. Don't hesitate to reach out if there is any way the Nominations Committee can help.

### Student and Resident Committee Update:

The Student & Resident Committee is led by Ashley Street and Natalie Russell. In October 2021 we hosted our annual Health System Pharmacy Administration and Leadership residency panel to provide pharmacy students an opportunity to hear from current residents and a residency program director on the opportunities provided through a residency program.

This year the committee will be focused on creating three committee

positions, vice chair, secretary, and communications coordinator to allow the students and residents an opportunity to become more involved with the committee. In addition, we are planning a webinar in early to mid-March on adjusting to life post-residency. We plan to have three speakers that are in different phases of their careers to help navigate this topic.



# Managing Staff/Supply Chain Shortages

The COVID pandemic has led to many challenges in healthcare including staff, and supply chain shortages. These challenges may lead to the inability of an organization to provide optimal patient care.

Staffing Shortages: Many organizations have had to become

creative in filling immediate gaps in healthcare staffing, and have had to plan for long term labor shortages. Potential short term staffing alternatives has included utilization of the National Guard to fill in as Pharmacy Technicians, environmental service personnel, patient transport or dietary service personnel. Additionally, National Guard personnel have assisted as medical assistants. Nurses and physician providers have been reassigned from active duty to hospitals across the nation. Pharmacists have been crosstrained in traditional Pharmacy technician roles such as in preparation of sterile products, and some pharmacists have been crosstrained as bedside nurses to assist in proning of patients with COVID, or in certain states, pharmacists have cross-trained to help with medication administration to patients at the bedside. In cases where pharmacists staff shortages are occurring, those organizations that are part of a health-system may consider utilization of remote verification from other hospitals in the health system, or a centralized

virtual rounding group with providers, pharmacists and other staff serving multiple different hospitals. Some organizations have utilized emergency medical technicians to staff Emergency rooms given the nursing shortages. Finally, the pandemic has helped organizations realize that quality care combined with efficiency is a must; thus, many organizations have utilized continuous improvement methodologies to map out best practice and have changed their practices accordingly.

Pharmacy technician shortages have been challenging over the past few years, but significantly worsened over the course of the pandemic. Several different strategies have been utilized in healthcare organizations to alleviate these shortages. Short term stop-gap measures such as premium pay for hours worked over 40 hours a week, and changes in drug delivery systems to immediate use versus those that require preparation has offloaded technician duties. Pharmacy students have been relied on more heavily for medication preparation and such duties as

medication reconciliation.

Outsourcing of certain tasks has been an option and in many cases has been financially neutral given employee compensation packages. Additionally, maximized use of automated dispensing cabinets with higher inventories and additional inventories have helped alleviate some of the pharmacy technician workload.

Intermediate timeline stop-gap measures have included utilizing personnel from other service lines as a pipeline for pharmacy technicians. Given that Pharmacy technicians require certification, and typically personnel working in patient transport, dietary, or environmental service lines do not require any certification, an organization may be able to recruit personnel to train as pharmacy technicians from within their own organization. It likely will be much easier to replace personnel in those other service lines versus a pharmacy technician that requires certification. To counter potential staff shortages in these other service lines, utilization of the organizations' volunteer pool may help to alleviate those shortages.

Other intermediate timeline stop-gap measures to bridge the Pharmacy technician gap may include partnerships with local community colleges/universities for a multi-week Pharmacy technician "bootcamp" to provide opportunities to train and then certify as a pharmacy technician, albeit a potential "parttime" position. Apprenticeships that engage local community members is another option for those who are not pursuing further education, but who may be able to work a certain number of hours training as a courier initially and then as a Pharmacy technician trainee. Laws in each state will govern the ability to utilize these types of programs to garner more staff.

Short to long term stop-gap measures may include a review of how to incorporate flexible scheduling, provision of strong management support, open lines of communication at all levels, input into decision making, accessibility to mental health and well-being resources to cope with job related stress (whether on-site or through a yearly stipend), or help with childcare or eldercare through onsite

care centers. Finally, maximized utilization of automation technology in pharmacy and throughout the hospital (kiosks for signing patients in for appointments, robotic tugs to deliver linen) are investments that may alleviate some of the challenges caused by staff shortages and may pay dividends in the future.

#### Supply Chain Shortages:

Medication shortages and shortages of supplies to prepare medications is an ongoing challenge for all healthcare organizations. Several strategies to mitigate the impact of these shortages may help prevent a negative impact on patient care. These strategies involve proactive management, and concurrent management strategies.

Proactively, organizations can institute a shortage management team which consists of pharmacists, physicians, nurses and respiratory therapists from each of the different specialty areas. Utilization of such a team allows development of a critical process map of when certain task need performed, development of guidelines for what drugs will be restricted and to which patient populations, alternative therapies to

utilize in these patient populations as impending drug shortages occur. Shortage management teams may consider utilization of modelling methods such as the A4R framework to give priority to patients when drugs shortages require the need for restrictions. These modelling methods allow for prioritization of patients and are crucial tools for emergency drugs, rarely marketed generics, an Oncologic therapies. Such a modelling tool allows staff the time needed to find and evaluate alternative treatment options. Other proactive measures include utilization of automation technology data analytics to improve the supply chain process through operational changes. Use of data to drive changes in par levels to current utilization, to prevent expired drug, and to review changes in prescribing patterns, along with review of average current monthly usage patterns by patient population and allocation status of medications will allow the organization to be more efficient at purchasing, save money and reduce waste. Drug shortage and tracking databases have proven effective in predicting future

shortages. These systems track period of the drug shortage, medications involved, frequency and duration of shortages, causes and potential impacts and management strategies. Organizations that maintain multiple sources to obtain medications and supplies likely will be more nimble in navigating any supply chain shortages. Many times if an organization does not utilize a certain supplier or manufacturer, it may not be able to attain medications or other supplies if it is not already on allocation for a certain medication or supply. Finally, communication and transparency are key to anticipating and managing medication shortages. Continuous and clear communication with regulatory bodies such as the FDA, and ASHP along with continuous monitoring of world events is key to anticipating and managing drug shortages. Consistent communication with drug representatives from various pharmaceutical companies is key as these agents often hear and are aware of impending drug shortages even before the FDA communicates or is aware of shortages.

Concurrent management strategies to alleviate the impact of medication or supply chain shortages are multifocal. Close communication between the pharmacy department and local supply chains is imperative. Additionally, Utilization of expanded expiration dates has helped to reduce the impact of shortages in the past. The FDA provides a database for extended expiration dates for medications on shortage and those with negative patient consequences if they would go on shortage. That website is Drug Shortages | FDA. The FDA also list a drug shortage database on this website. A hospital that is part of a healthcare system may consider redistribution of available stock within the health system. This requires excellent communication and transparency amongst stakeholders and is way to care for different patient populations where allocations can be shared. Compounding of low risk medications in severe shortage situations. Utilization of waste management techniques such as patient schedule clustering in situations where individual patient doses are small, but medications are

only available in high dose multi-use vials is a waste to mitigate shortages. For example, pediatric oncology patients may not require high doses of a medication that is only available in 500 mg vials; thus utilization of patient-clustered schedule can reduce waste. Use of double syringe techniques as is utilized in anesthesia departments may be another alternative to mitigate drug shortages. Automated expiry date check systems in concert with accelerated dispensing of medications close to expiration may reduce waste. Exchanges with other pharmacies may help prevent disposal of medication that would expire otherwise and such a platform (Pharmaswap) has been utilized in the Netherlands. Review of package sizes and options may reduce waste as well. Optimization of process flows can reduce waste. Frequency of preparing batches of preparations should be increased to minimize the chance of treatment modifications, especially in medications with short shelf lives. Dose rounding or "flat" or fixed dosing can be automated and prevent leftover medications. Additionally, review of distribution

times in relationship to patient specific medications not in an automated dispensing device that require any special preparation may reduce waste and decrease shortages of medications. Many organizations prefer not to utilize patient medications from home; however, a recent study demonstrated a financial reduction of 40% of inpatient medication waste utilizing this strategy. Finally, evaluation of medication quantities dispensed to patients in the ambulatory setting may offset and prevent medication supply shortages. This may particularly beneficial when initiating therapy, as discontinuation occurs more frequently during this time period. Organizations could utilize split dose programs that dispense the first 14 days of therapy which have shown benefit in oncology patients where pharmacy cost and waste were reduced.

Whether being proactive or acting concurrently while supply change shortages occur, education about how to minimize or prevent these shortages is needed. Education along the continuum from policy

makers, to manufacturers to suppliers to organizations, providers and ultimately patients is important in a successful strategy to be able to provide excellent patient care while navigating supply chain shortages.

### **Awards**

**Dan Abazia** earned the American College of Clinical Pharmacy CADM PRN award (October 2021)

**Tyler Vest** earned the American Society of Health-System Pharmacists Distinguished Service Award (December 2021)

**Tyler Vest** earned the North Carolina Association of Pharmacists Distinguish Young Pharmacist Award (June 2021)

### **Publications**

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