

### REDUCING FALLS IN OLDER ADULTS USING REMOTE TELEMONITORING

#### **ABSTRACT:**

Advancements in hypertension evaluation and management through guideline development have significantly improved patient prognosis. However, in older adults, white coat hypertension (WCH)—where blood pressure is elevated in clinical settings but not at home—is often overlooked. WCH is a known risk factor for cognitive decline and cardiovascular issues. Despite its prevalence, there are no established guidelines for screening or managing WCH. Patients over 80 with WCH require thorough assessments to detect labile blood pressure changes, complicating management. Balancing treatment risks is crucial for optimal care. Leveraging telemonitoring devices can enhance hypertension diagnosis and improve health outcomes for older adults by reducing the risk of over-medication and falls. This research presentation evaluates the benefits of adding remote blood pressure monitoring to the clinical management of older adults with WCH, demonstrating the advantages of tracking hypertension outside the clinical settings in a pilot research study.

### **AUTHORS:**



Catherine C. Letherer, DMSc, MBA, PA-C

Associate Professor at California Baptist University PA Studies

- Adult medicine clinical practice with an interdisciplinary team at Mt.
   San Antonio Gardens to optimize healthcare for older adults.
- PA educator for 12 years and Academic Director at CBU PA Studies past 5 years.
- Doctorate earned from Southern Illinois University and awarded "Excellence in Scholarship" of Class of 2024-25.
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### REDUCING FALLS IN OLDER ADULTS USING REMOTE TELEMONITORING

### **AUTHORS:**

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- Medical Science Liaison (MSL) for pharmaceutical company, past 16 years.
- PharmD degree from the University of Southern California School of Pharmacy
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- Staff Physician Pomona Valley Health Center in La Verne, California.
- Campus Physician at Mt. San Antonio Gardens a Continuing Care Retirement Community
- Doctor of Medine University of Southern California
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**LOCATION:** 

## EDUCATING MEDICAL LIAISONS TO RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS FACED BY PEOPLE WHO ARE UNHOUSED

### **ABSTRACT:**

Introduction: Healthcare in Action (HIA) is an organization in Los Angeles County that provides mobile medical clinics, as well as social support to people who are unhoused through case manager "peer navigators" (PNs). In their frequent contact with their high-risk clientele, PNs often encounter acute medical situations that they are ill-equipped to address. This project aimed to provide training to help PNs recognize medical situations and differentiate between those requiring emergent intervention (e.g., calling 911) vs. monitoring or a prompt consultation or appointment with the organization's medical team.

Methods: HIA PNs were invited by their organization to an interactive training session to equip them to recognize and evaluate common acute incidents pertaining to blood pressure, mental health, skin wounds, and loss of consciousness. Ketchum students with faculty supervision provided training, teaching participants how to take blood pressure, place an unconscious victim in the recovery position and use Narcan, as well as how to differentiate the severity of wound infections, and provide or refer for appropriate care. They learned how to utilize validated instruments to assess the severity of depression and anxiety to likewise enable them to determine what level of medical intervention, if any, was indicated. To reinforce the training, our team designed and provided each participant with a small, laminated medical reference booklet of guidelines and action indications pertaining to these topics that was consistent with HIA's protocols.

Results: Ten PNs participated in the training and completed pre- and post-intervention surveys that measured their change in knowledge of how to handle various medical/psychiatric incidents, and confidence to manage urgent situations appropriately. Participants' understanding and confidence in their ability to rightly respond in critical situations increased as much as ninefold across all categories measured.

# EDUCATING MEDICAL LIAISONS TO RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS FACED BY PEOPLE WHO ARE UNHOUSED - CONTINUED -

### **ABSTRACT CONTINUED:**

Conclusion: The intervention equipped PNs with better skills to accurately assess medical emergencies, including opioid overdose and blood pressure crises, adding value to their role as medical liaisons. The training and the reference tools provided are resources that are highly likely to be usable by other organizations. Well-equipped liaisons working with the unhoused have the potential to improve outcomes in this vulnerable population, even while simultaneously reducing unnecessary ER visits.

### **AUTHORS:**



Mary Antikyan, PA-S Marshall B. Ketchum University School of Physician Assistant Studies

University. She is currently completing her clinical rotation in internal medicine. She previously worked as a medical scribe in urgent care and as a medical assistant in allergy and immunology.

Mary Antikyan is a Physician Assistant student at Marshall B. Ketchum

Claire Boenisch is a third-year physician assistant student from Marshall B Ketchum University. She has served as class president during her time in school, engaging in various campus and community related events. She appreciates that through creating this poster project, she and her classmates were able to help the local community in an impactful way, and she looks forward to continuing to make an impact as a future provider.



Claire Boenisch, PA-S Marshall B. Ketchum University School of Physician Assistant Studies

# EDUCATING MEDICAL LIAISONS TO RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS FACED BY PEOPLE WHO ARE UNHOUSED - CONTINUED -

### **AUTHORS:**



Danielle Gagain, PA-S Marshall B. Ketchum University School of Physician Assistant Studies

Danielle Gagain is a physician assistant student at Marshall B. Ketchum University, graduating in November 2025. She has pre-PA experience working as an EMT, scribe, and OBGYN medical assistant. Her interest in emergency medicine is driven by a passion for patient advocacy and health equity. She also enjoys volunteering in her community.

Jazmin Hiemer is a third-year Physician Assistant student at Marshall B. Ketchum University, graduating in November 2025. She grew up in Orange County and stayed local for her undergraduate studies at Chapman University. After graduation, she gained hands-on healthcare experience as an EMT, medical scribe, and medical assistant in both emergency and primary care settings. Her clinical work and volunteer involvement in community health programs have shaped her commitment to compassionate, patient-centered care, and she hopes to continue serving underserved populations as a future PA.



Jazmin Hiemer, PA-S Marshall B. Ketchum University School of Physician Assistant Studies



Arthur Williams, PA-S Marshall B. Ketchum University School of Physician Assistant Studies

Arthur Williams is a physician assistant student at Marshall B. Ketchum University, Class of 2025. A former Marine Corps infantry team leader and Operation Iraqi Freedom veteran, he went on to serve his community as a firefighter paramedic. Now pursuing his PA career, Arthur plans to continue serving patients in emergency medicine within the emergency department.

# EDUCATING MEDICAL LIAISONS TO RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS FACED BY PEOPLE WHO ARE UNHOUSED - CONTINUED -

### **AUTHORS:**



Robyn Dettmar, MPAS, PA-C Marshall B. Ketchum University School of Physician Assistant Studies

Robyn Dettmar is an associate professor and the Academic Director at Marshall B. Ketchum University. She oversees the masters capstone and teaches the gastroenterology course, and lectures on topics in nutrition and women's health. She has worked clinically in primary care, urgent care and palliative medicine. She has published articles in JAAPA, PAEA and CAPA journal on a range of topics.

**LOCATION:** 

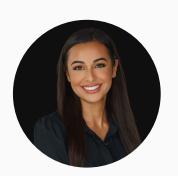
### THE EFFECTS OF PSYCHOLOGICAL AND PHYSICAL THERAPIES ON CHRONIC PELVIC PAIN IN WOMEN

### **ABSTRACT:**

This literature review assessed the effectiveness of psychological and physical therapies in managing chronic pelvic pain in women, analyzing three systematic reviews published from 2019 to 2023. The review examined diverse psychological interventions, highlighting cognitive-behavioral therapy (CBT) and mindfulness as particularly effective in reducing psychological distress, alleviating pain, and enhancing quality of life. A second review focused on pain-centric psychological strategies, noting the inconsistent efficacy of CBT, although mindfulness consistently demonstrated reductions in pain intensity. The third review analyzed pelvic floor physical therapy combined with mindfulness, which was found to significantly alleviate pain compared to standard treatments. Critiques of these studies emphasized the need for uniform methodologies and longer follow-ups to fully ascertain the long-term benefits of interventions. In conclusion, these findings suggested promising results for the alleviation of chronic pelvic pain in women, however, further research was necessary to optimize and standardize treatment approaches.

## THE EFFECTS OF PSYCHOLOGICAL AND PHYSICAL THERAPIES ON CHRONIC PELVIC PAIN IN WOMEN - CONTINUED -

### **AUTHOR:**



Amal Arshad, MSPA, PA-C

Amal Arshad is a graduate of University of Central Florida, where she earned dual Bachelor of Science degrees in Biology and Health Sciences, with a minor in Anthropology. At UCF, she was deeply committed to community service, working extensively with underserved populations to improve healthcare access.

She completed her clinical training at Southern California University, demonstrating leadership as both Diversity Chair and Social Media Chair during her didactic year. In these roles, she fostered inclusivity and promoted cultural awareness. Her dedication to patient centered care fuels her interest in integrative medicine, aiming to bridge traditional and complementary approaches. Fluent in three languages, Amal is an avid hiker who enjoys dancing, writing, and creating art.

**LOCATION:** 

## HPV SELF-TESTING—A PA-LED CERVICAL CANCER SCREENING PILOT FOR WOMEN EXPERIENCING HOMELESSNESS

### **ABSTRACT:**

Cervical cancer screening rates for women experiencing homelessness within our FQHC and nationally are lower than rates for women who are housed. Barriers to completion of screening include difficulty accessing care in a traditional clinic setting, prior history of trauma, competing survival needs, and co-morbid mental health and substance use issues. HPV self-collection is a promising mode of screening, particularly for women experiencing homelessness because it is easier to complete than a pelvic exam. The homeless health care PAs and the QI department at Venice Family Clinic launched an HPV self-collection pilot project, offering testing to 75 women experiencing homelessness who were overdue or due for screening when seen in a variety of homeless health care settings—on the street, in mobile clinics, shelter-based clinics, or in the traditional clinic. We tracked all results (normal, HR HPV 16/18, and other HR HPV), as well as completion of follow up (pap or colposcopy), and surveyed women on their perceptions around traditional screening vs self-testing. We will present our real-world data surrounding a novel, low-barrier screening tool that improves cancer detection, while empowering women to be actively involved in their care. Our pilot shows how PAs are innovators who improve cancer detection and make care more equitable for our high-risk patients.

## HPV SELF-TESTING—A PA-LED CERVICAL CANCER SCREENING PILOT FOR WOMEN EXPERIENCING HOMELESSNESS

### **AUTHORS:**



Christina Cady, MPH, MHS, PA-C

Christina Cady, MPH, MHS, PA-C is a Physician Assistant (PA) at Venice Family Clinic in Los Angeles, where she provides primary care and homeless street medicine to underserved communities. She earned her PA degree from Duke University School of Medicine and her Master of Public Health degree from San Diego State University. Christina is passionate about health equity, harm reduction, and expanding access to compassionate, patient-centered care for vulnerable populations.

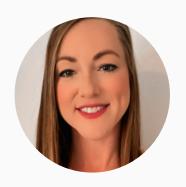
Carrie Kowalski was born and raised in Milwaukee, Wisconsin. After graduating from University of Wisconsin, she worked as a medical assistant and was shocked to learn how many Americans were uninsured. She learned about the importance of preventative medical care and adopted a core value of health care as a human right. Carrie trained at USC's Primary Care Physician Assistant Program—a Program geared toward training clinicians to work with the medically underserved. She began her career at Venice Family Clinic in 2012, serving as the clinic's first Physician Assistant. She learned about the tenants of Homeless Healthcare from Dr. Terri Brehove and was trained in Street Medicine by Dr. Coley King. She is skilled in street medicine, mobile clinics, and shelter-based care, providing care for the communities' most vulnerable patients. Carrie was recognized in USC's Trojan PA Alumni Hall of Fame in 2017, and she received Venice Family Clinic's Etz-Chaim Compassionate Care Award in 2018.



Carrie Kowalski, MPAP, PA-C

## HPV SELF-TESTING—A PA-LED CERVICAL CANCER SCREENING PILOT FOR WOMEN EXPERIENCING HOMELESSNESS - CONTINUED -

### **AUTHORS:**



Samantha Peache she/her/hers Venice Family Clinic Ql Coordinator

I have worked with Venice Family Clinic for the last four and a half years as a Quality Improvement Coordinator. My clinical and administrative knowledge and LEAN Methodology Certification come from UCLA, where I worked for seven years prior to Venice Family Clinic. I hold a bachelor's degree of science in biology from DePaul University in Chicago, IL. Some of the projects I focus on are cervical cancer screening, women's health, patient experience, empanelment, and our patient portal. What I love most about QI is being a part of different collaborative teams that all want to improve the health and well-being of our patients and enhance their experiences; especially those most vulnerable who are experiencing homelessness. I recently extended my passion for serving others by becoming a Rotarian at my local rotary in March of 2025. In my free time, some of my hobbies include watching sports, trying new recipes, traveling, crafting, and spending quality time with friends and family.

**LOCATION:** 

# SURGEONS' BURNOUT AFFECTS SURGICAL PHYSICIAN ASSOCIATES' WELLNESS IN UNITED STATES HOSPITALS AND AMBULATORY SURGERY CENTERS

#### **ABSTRACT:**

Surgical physician associates (SPAs) are integral members of the healthcare workforce. Since the COVID-19 pandemic, surgeons' burnout increased. Burnout is a chronic response to job related stress. The empirical evidence was scarce regarding SPAs' wellness. This study examined the relationship between surgeons' burnout and SPAs' wellness and explored the perceived impact of surgeons' burnout on SPAs' wellness in U.S. hospitals and ambulatory surgery centers (ASCs) during global health crises. This national and cross-sectional study used a convergent mixed-method approach. Primary data were collected using a self-developed survey instrument. The final sample sizes were n1 = 251 for the quantitative analyses, and n2 = 202 for the qualitative analyses. Triangulation analyses were completed. Three key findings emerged. Quantitatively, surgeons' burnout decreased SPAs' mental, emotional, social, and spiritual wellness. Qualitatively, surgeons' burnout negatively impacted SPAs' physical, mental, emotional, social, and spiritual wellness. Triangulation analysis affirmed the quantitative-qualitative findings' convergence. Three implications to healthcare practitioners emerged. First, healthcare leaders need to cultivate a wellness culture that embraces their workforces' wellness practices. Second, SPAs should focus on self-care and strategies to improve their wellness. Third, policies aimed at reducing burnout are needed to improve healthcare workforces' wellness and align with the 4th aim of the Quadruple-Aim initiative.

# SURGEONS' BURNOUT AFFECTS SURGICAL PHYSICIAN ASSOCIATES' WELLNESS IN UNITED STATES HOSPITALS AND AMBULATORY SURGERY CENTERS - CONTINUED -

### **AUTHORS:**

Rhionna J. Smith, A.T. Still University Lihua Dishman, A.T. Still University John W. Fick, A.T. Still University Kathie Thomas, A.T. Still University

**LOCATION:** 

## BUILDING THE BRIDGE: AN INTERDISCIPLINARY APPROACH TO DEVELOPING A PEDIATRIC ACUTE CARE APP FELLOWSHIP

### **ABSTRACT:**

Transitioning from academic training to clinical practice for Advanced Practice Providers (APPs) can be challenging without structured support. A fellowship provides specialized, hands-on training to enhance clinical skills and confidence while fostering interprofessional collaboration, preparing APPs to effectively work within diverse healthcare teams to provide comprehensive, high-quality care.

Central to the development of our APP Fellowship was the creation of the Fellowship Advisory Board (FAB), an interdisciplinary group of nurse practitioners, physician assistants, and institutional leaders who collaborated in designing a structured educational program tailored to the needs of APPs in high-acuity pediatric settings. The FAB serves as the driving force behind the fellowship's implementation and quality assurance and promotes professional growth, supports quality patient care, and contributes to educational research.

Goals include improved clinical confidence and skill proficiency, enhanced interdisciplinary communication, and greater APP satisfaction and retention. The program is designed to serve as a sustainable pipeline for high-performing pediatric APPs across multiple specialties.

**LOCATION:** 

## BUILDING THE BRIDGE: AN INTERDISCIPLINARY APPROACH TO DEVELOPING A PEDIATRIC ACUTE CARE APP FELLOWSHIP - CONTINUED -

### **AUTHORS:**

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### "NAVIGATING HIGH-RISK WATERS: SUCCESSFUL SURGICAL INTERVENTION FOR A COMPLEX CARDIAC CASE IN AN AGING ICON"

#### **ABSTRACT:**

Complex cardiothoracic diseases in aging can be effectively managed through a collaborative surgical team approach. This case study presents a 76-year-old female with a history in the music industry, seen at an outside hospital with a non-ischemic ST-elevation myocardial infarction, deemed unsuitable for percutaneous coronary intervention due to complex cardiac conditions, including rare large coronary artery aneurysms, severe mitral valve prolapse with regurgitation, and an ascending aortic aneurysm. Having declined surgery at an outside facility, she presented for evaluation for highrisk cardiac surgery. The cardiothoracic physician assistant was the initial contact with the patient and established a rapport. With the complexities of the case, the PA and surgeon explained each part of the high-risk procedure, providing drawings, and the patient understood and agreed to undergo the high-risk surgery. Two surgeons having a niche in complex cases developed a plan; the patient underwent median sternotomy, coronary artery resection and vein graft patch of the LAD and RCA, pulmonary artery transection exposure, and complex bioprosthetic mitral valve replacement. Postoperatively, she was discharged with positive follow-up outcomes. This case highlights the importance of the physician assistant establishing a rapport with patients and meeting them where they are for a lifesaving high-risk procedure.

### **AUTHORS:**

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**LOCATION:** 

### IMPACT OF GAMIFICATION ON ECG INTERPRETATION

#### **ABSTRACT:**

Within medical training, there are often subject matters or skills which students or practitioners often perceive as more difficult or challenging to master. This study aims to evaluate the effects of gamification as a teaching strategy on student's perception of a topic which is both difficult and of significant clinical importance.

Accurate and efficient electrocardiogram (ECG) interpretation is a critical skill necessary in the training of clinicians. Unfortunately, graduating medical students, graduating physician associate (PA) students, and medical residence performance in ECG interpretation are suboptimal. 1-3 Medical institutions and their educators are tasked with finding creative and effective ways of closing this competency gap to improve ECG interpretation literacy, accuracy, and efficiency. This study evaluates the effects on students' perception of ECG interpretation, as well as their performance following implementation of elements of gamification into their curriculum.

### **AUTHORS:**

James Zapata, DMSc, MS, PA-C
Brian Bovee, PhD
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Catherine Letherer, DMSc, MBA, PA-C

**LOCATION:** 

### EMPOWERED TO THRIVE: HEALTH EDUCATION FOR LIFE AFTER INCARCERATION

### **ABSTRACT:**

Introduction: Following release from prison, many face challenges navigating healthcare systems after years without basic medical care. This project aimed to address how PAs can address healthcare knowledge gaps among formerly incarcerated individuals by providing education on diabetes, eye health, and dental care.

Methods: We planned two interventions for 60 participants at Mass Liberation, a non-profit organization that assists reintegrating recently released incarcerated individuals back into society. Each one-hour session included an educational presentation and resources, like pamphlets with low-cost healthcare screening options, grocery lists, and incentive bags with dental care items. Pre-and-post surveys assessed knowledge gained and intentions to seek care.

Results: Of the 29 total participants, 25 completed both surveys. Demographic analysis revealed that 24% had not visited a medical or dental provider in over three years, and 48% had not had an eye exam. Combined knowledge scores increased from 79% to 89%, with the most notable improvement of 27.3% when asked if eye diseases always present with symptoms. Following the presentation, a statistically significant 92% indicated they were likely to seek preventive care within six months.

Conclusion: Despite some limitations, including lower-than-expected attendance, these findings suggest that our educational efforts empowered participants to prioritize their health post-release.

**LOCATION:** 

### EMPOWERED TO THRIVE: HEALTH EDUCATION FOR LIFE AFTER INCARCERATION - CONTINUED -

### **AUTHORS:**



Hannah Burgess, PA-S Final year PA Student, Marshall B. Ketchum University

Hannah Burgess is a Physician Assistant student at Marshall B. Ketchum University with a variety of experiences across different healthcare disciplines. She has also served six years in the United States Air Force Reserve. Her clinical interests include gastroenterology and women's health, and she is excited to serve diverse communities and promote preventive care throughout her career. Outside of school, she enjoys skiing and traveling.

Nayeli Guerrero is a PA student at Marshall B. Ketchum University with a strong commitment to serving underserved communities. Outside of medicine, she enjoys hiking, visiting art museums, and exploring life with her three dogs—all of which bring balance and creativity to her journey in healthcare.



Nayeli Guerrero, PA-S Final year PA Student, Marshall B. Ketchum University



Laura Penuel, PA-S Final year PA Student, Marshall B. Ketchum University

Laura Marie Penuel is a Physician Assistant student at Marshall B. Ketchum University and is expected to graduate in November 2025. While serving as a Corpsman in the United States Coast Guard for eight years, she discovered a passion to become a competent, confident, and caring provider. After graduation, she hopes to practice in outpatient Internal Medicine or Family Medicine, with plans to work in a surgical component later in her career. Outside of medicine, Laura enjoys spending time with her husband, their two-year-old son, and their two Great Danes.

### EMPOWERED TO THRIVE: HEALTH EDUCATION FOR LIFE AFTER INCARCERATION - CONTINUED -

### **AUTHORS:**

Kim Pham is a PA student at Marshall B. Ketchum University with a background in family medicine as a phlebotomist and medical assistant. Her early clinical experience sparked a passion for caring for patients with comorbidities. During PA school, she has deepened her interests in primary care and cardiology. Outside of medicine, she enjoys cooking, reading, and working out, and looks forward to serving her community as a future PA.



Kim Pham, PA-S Final year PA Student, Marshall B. Ketchum University



Ashley Van Belle, PA-S Final year PA Student, Marshall B. Ketchum University

Ashley Van Belle, PA-S is a PA student at Marshall B. Ketchum University with interests in orthopedics and surgery. She enjoys traveling and spending time outdoors, and looks forward to a career providing handson, patient-centered care.

Dr. McKenna is an Associate Professor and the founding Director of the Doctor of Medical Science Program at Marshall B. Ketchum University in Fullerton CA. He was their PA School's former Interim Program Director and Director of Accreditation, where he still teaches evidence-based medicine. A former Navy Corpsman, Bob was a PA in emergency medicine/urgent care prior to a 33-year career in the biopharmaceutical industry leading Field Medical Affairs teams in multiple specialties. Dr. McKenna graduated from the University of Oklahoma College of Medicine's Physician Associate Program, completed his Master of Public Health at Portland State University, and graduated from the University of Lynchburg with a Doctorate in Medical Science in PA Education. Bob is an NCCPA-certified PA licensed to practice medicine in California. He volunteers with the Medical Reserve Corps of Los Angeles and is a volunteer scientific SCUBA diver at the Aquarium of the Pacific in Long Beach, California.



Robert E. McKenna, DMSc, MPH, PA-C, Director, Doctor of Medical Science Program, Faculty at Marshall B. Ketchum University, Fullerton, CA, School of Physician Assistant Studies

### THE PA POST-PROFESSIONAL DOCTORATE

#### **ABSTRACT:**

Purpose: The physician associate (PA) experiment has evolved to now include post-professional doctorates like other healthcare disciplines. We aimed to provide an overview of the 2024 DMSc landscape to guide future researchers and optimize current understanding of the field.

Methods: A census assessment of postgraduate doctoral degrees using professional networking and a backward citation search technique was conducted.

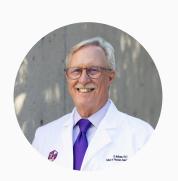
Results: In 2024, we identified 28 post-professional PA doctoral degree programs, most conferring a Doctor of Medical Science degree. The number of PA doctoral degree programs doubled between 2022 and 2024. The tuition for an online PA doctorate ranges from \$15,240 to \$47,880, and most programs require at least 12 months to complete. Nearly all are online and designed for working PAs. Within these 28 doctoral programs for PAs, the most common areas of study include PA education, healthcare administration, leadership, management, and several clinical and administrative concentrations. All programs are accredited by one of six federally recognized agencies.

Conclusion: The social, professional, economic, and financial factors pertinent to a PA considering a post-professional doctorate are of interest to PA graduates, educators, and social scientists, especially since the AAPA and PAEA dropped their objection to the doctoral degree as the PA entry-to-practice credential.

**LOCATION:** 

### THE PA POST-PROFESSIONAL DOCTORATE - CONTINUED -

### **AUTHORS:**



Robert E. McKenna, DMSc, MPH, PA-C, Director, Doctor of Medical Science Program, Faculty at Marshall B. Ketchum University, Fullerton, CA, School of Physician Assistant Studies

Dr. McKenna is an Associate Professor and the founding Director of the Doctor of Medical Science Program at Marshall B. Ketchum University in Fullerton CA. He was their PA School's former Interim Program Director and Director of Accreditation, where he still teaches evidence-based medicine, and serves on numerous committees. He began his medical career as a US Navy Corpsman and later served as a PA in emergency medicine/urgent care prior to a 33-year career in the biopharmaceutical industry as a Medical Science Liaison or Director of Field Medical affairs for Merck & Co., Sanofi Genzyme, and Radius health. Therapeutic areas he was active in include cardio-renal diseases, pain & inflammation, rheumatology, asthma, allergy and immunology, and metabolic bone diseases. He is also the former Internal Medicine Editor for Audio-Digest, Wolters Kluwer Health.

Dr. McKenna graduated from the University of Oklahoma College of Medicine's Physician Associate Program, then completed his Master of Public Health, concentrating on Health Administration and Policy, at Portland State University. He graduated from the University of Lynchburg with a Doctorate in Medical Science, concentrating on PA education. Bob is a Fellow of the Academy of Doctoral PAs, American Academy of Physician Associates, the California Academy of PAs and is also a current or former member of multiple other professional societies. Dr. McKenna was awarded a research grant from the AAPA in 2022 and is a current member of the AAPA Research and Strategic Initiative Commission, a peer reviewer for several journals, a multiply published author, and invited presenter at national meetings. Bob is an NCCPA-certified PA licensed to practice medicine in California. He volunteers with the Medical Reserve Corps of Los Angeles and is a volunteer scientific SCUBA diver at the Aquarium of the Pacific in Long Beach, California.

### THE PA POST-PROFESSIONAL DOCTORATE - CONTINUED -

### **AUTHORS:**



Roderick S. Hooker, PhD, MBA, PA Health Policy Analyst (Ret.)

Roderick S. Hooker has researched the medical workforce across many decades going back to 1980. He is an author of over 250 publications: mostly in peer-reviewed literature. His scholarly work includes four books, many book chapters, and numerous reports and presentations. Hooker's research interests are in the fields of medical economics, health policy, workforce issues, and clinical rheumatology. Consulting on medical staffing, education, and medical care organization has taken him to Canada, Australia, Scotland, Taiwan, the Netherlands, and other countries.

Before graduating from the St. Louis University Physician Assistant Program in 1978, Hooker served as a Hospital Corpsmen in the U.S. Navy from 1965-1969 aboard a ship and with the Second Marine Division. While training as a tropical biologist, Hooker worked in Costa Rica as a graduate student. He then served in the U.S. Peace Corps, in the Kingdom of Tonga (South Pacific) from 1973 to 1976. He holds an undergraduate degree (BA, 1972) from University of Missouri, a PA Certificate from St. Louis University, an MBA (1985) from City University, Seattle, WA and a PhD in health policy (1998) from the Mark O. Hatfield School of Government, Portland State University, Portland, OR.

For two decades, Hooker worked as a rheumatology PA with Kaiser Permanente and concurrently as a health services researcher with the Kaiser Permanente Center for Health Research, in Portland, OR. While in Oregon Hooker served as a Coast Guard Reserve officer and a medical administrative officer; he retired with 24 years of accumulative military service.

He then worked for the Department of Veterans Affairs in Dallas and the University of Texas where he developed and directed a health services research division in rheumatology. Hooker also served as an adjunct professor, consultant, or committee member for several U.S. and international universities, organizations, and medical societies. Most recently he was the Senior Director of the Lewin Group overseeing health policy and health professions research. He has mentored 11 doctoral students, 6 postdoctoral fellows, and numerous graduate students. Although he is retired and lives in semi-rural Southwest Washington State, he continues to mentor new scholars through multiple collaborations with PAs and others who are new to research, and he continues to actively publish.

## OFFICE-BASED PROCEDURES BY PHYSICIAN ASSOCIATES AND NURSE PRACTITIONERS ARE OUTPACING FAMILY PHYSICIANS

### **ABSTRACT:**

Purpose: This study investigates procedural practices of family physicians (FPs), physician associates (PAs), and nurse practitioners (NPs) in older adult care, examining trends from 2014-2021.

Methods: A retrospective study used Medicare Part-B data. The CAFM list of FP procedures resident should learn was modified to align with CPT codes. The databases were probed for procedure claims by FPs, PAs, and NPs, linking data with CPT codes and NPI numbers. Procedure trends and provider participation were analyzed.

Results: In 2021, 904,278 mCAFM outpatient procedures were filed by 9,410 FPs. Simultaneously, 23,581 NPs and PAs filed 9.6 million procedures, with 96% involving skin/musculoskeletal systems. From 2014-2021, FP procedures declined by 33%, with 36% fewer FPs filing claims. Conversely, PA/NP numbers increased by 72%, and those filing claims by 74%. PAs filed twice as many skin/musculoskeletal procedure claims as NPs, while NPs filed 1.25 times more claims in EENT, pulmonary, genitourinary, gastrointestinal, and women's health categories.

Conclusion: FP procedures are declining, while PA/NP procedures are increasing, with differing procedure patterns. These trends may result from shifts in FP practice, referrals, task delegation, and changes in provider roles. Further research should examine the drivers of these shifts in outpatient procedural activity.

**LOCATION:** 

## OFFICE-BASED PROCEDURES BY PHYSICIAN ASSOCIATES AND NURSE PRACTITIONERS ARE OUTPACING FAMILY PHYSICIANS - CONTINUED -

### **AUTHORS:**



Robert E. McKenna, DMSc, MPH, PA-C, Director, Doctor of Medical Science Program, Faculty at Marshall B. Ketchum University, Fullerton, CA, School of Physician Assistant Studies

Dr. McKenna is an Associate Professor and the founding Director of the Doctor of Medical Science Program at Marshall B. Ketchum University in Fullerton CA. He was their PA School's former Interim Program Director and Director of Accreditation, where he still teaches evidence-based medicine, and serves on numerous committees. He began his medical career as a US Navy Corpsman and later served as a PA in emergency medicine/urgent care prior to a 33-year career in the biopharmaceutical industry as a Medical Science Liaison or Director of Field Medical affairs for Merck & Co., Sanofi Genzyme, and Radius health. Therapeutic areas he was active in include cardio-renal diseases, pain & inflammation, rheumatology, asthma, allergy and immunology, and metabolic bone diseases. He is also the former Internal Medicine Editor for Audio-Digest, Wolters Kluwer Health.

Dr. McKenna graduated from the University of Oklahoma College of Medicine's Physician Associate Program, then completed his Master of Public Health, concentrating on Health Administration and Policy, at Portland State University. He graduated from the University of Lynchburg with a Doctorate in Medical Science, concentrating on PA education. Bob is a Fellow of the Academy of Doctoral PAs, American Academy of Physician Associates, the California Academy of PAs and is also a current or former member of multiple other professional societies. Dr. McKenna was awarded a research grant from the AAPA in 2022 and is a current member of the AAPA Research and Strategic Initiative Commission, a peer reviewer for several journals, a multiply published author, and invited presenter at national meetings. Bob is an NCCPA-certified PA licensed to practice medicine in California. He volunteers with the Medical Reserve Corps of Los Angeles and is a volunteer scientific SCUBA diver at the Aquarium of the Pacific in Long Beach, California.

## OFFICE-BASED PROCEDURES BY PHYSICIAN ASSOCIATES AND NURSE PRACTITIONERS ARE OUTPACING FAMILY PHYSICIANS - CONTINUED -

### **AUTHORS:**



Roderick S. Hooker, PhD, MBA, PA Health Policy Analyst (Ret.)

Roderick S. Hooker has researched the medical workforce across many decades going back to 1980. He is an author of over 250 publications: mostly in peer-reviewed literature. His scholarly work includes four books, many book chapters, and numerous reports and presentations. Hooker's research interests are in the fields of medical economics, health policy, workforce issues, and clinical rheumatology. Consulting on medical staffing, education, and medical care organization has taken him to Canada, Australia, Scotland, Taiwan, the Netherlands, and other countries.

Before graduating from the St. Louis University Physician Assistant Program in 1978, Hooker served as a Hospital Corpsmen in the U.S. Navy from 1965-1969 aboard a ship and with the Second Marine Division. While training as a tropical biologist, Hooker worked in Costa Rica as a graduate student. He then served in the U.S. Peace Corps, in the Kingdom of Tonga (South Pacific) from 1973 to 1976. He holds an undergraduate degree (BA, 1972) from University of Missouri, a PA Certificate from St. Louis University, an MBA (1985) from City University, Seattle, WA and a PhD in health policy (1998) from the Mark O. Hatfield School of Government, Portland State University, Portland, OR.

For two decades, Hooker worked as a rheumatology PA with Kaiser Permanente and concurrently as a health services researcher with the Kaiser Permanente Center for Health Research, in Portland, OR. While in Oregon Hooker served as a Coast Guard Reserve officer and a medical administrative officer; he retired with 24 years of accumulative military service.

He then worked for the Department of Veterans Affairs in Dallas and the University of Texas where he developed and directed a health services research division in rheumatology. Hooker also served as an adjunct professor, consultant, or committee member for several U.S. and international universities, organizations, and medical societies. Most recently he was the Senior Director of the Lewin Group overseeing health policy and health professions research. He has mentored 11 doctoral students, 6 postdoctoral fellows, and numerous graduate students. Although he is retired and lives in semi-rural Southwest Washington State, he continues to mentor new scholars through multiple collaborations with PAs and others who are new to research, and he continues to actively publish.

## OFFICE-BASED PROCEDURES BY PHYSICIAN ASSOCIATES AND NURSE PRACTITIONERS ARE OUTPACING FAMILY PHYSICIANS - CONTINUED -

### **AUTHORS:**



Robert L. Christian, BA

Mr. Christian is a dynamic and driven data analyst, data scientist, and full stack web developer, passionate about extracting insights from data to inform strategic decisions and improve processes. He was awarded a Professional Musician certificate in composition and theory from Portland Community College, an associate's degree in business administration from the Borough of Manhattan Business College, and his baccalaureate in history from Baruch College. He is currently a Senior Data Analyst for Optum Health where he led the product implementation data analytics team, focusing on house call data management and analysis. In his free time, he is also a Freelance Data Analysist who has contributed to projects pertaining to government and social services, labor statistics, and America's healthcare workforce and provides recommendations on research questions and structure to provide best quality outcomes. Robbie was recently married and lives with his wife in Portland, OR.

### ADDRESSING THE EXPANDING DEMANDS OF TRANSGENDER AND GENDER-DIVERSE HEALTH

#### **ABSTRACT:**

The increasing visibility and medical needs of transgender and genderdiverse (TGD) individuals have exposed critical gaps in healthcare education and provider preparedness. Despite a growing demand for gender-affirming care, many healthcare professionals report insufficient training, while TGD patients often face discrimination and must educate their own providers. This capstone project reviews existing educational opportunities and barriers in TGD healthcare, highlighting limitations in accessibility, cost, and clinical exposure. Building upon current models, the project proposes a novel, costeffective, and flexible fellowship program aimed at practicing NPs, PAs, MDs, and DOs. The fellowship integrates asynchronous didactic coursework with 150 hours of clinical experience in diverse gender-affirming care settings. Curriculum components include hormone therapy, psychiatry, sex education, surgical education, and legal/ethical training, each designed to equip providers with practical and culturally competent skills. Emphasizing mentorship and long-term sustainability, the program also requires graduates to serve as future mentors. This initiative addresses a national need by creating a scalable model to train inclusive, knowledgeable, and confident providers in TGD healthcare.

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**LOCATION:** 

## STRONG COFFEE, WEAK CONSENSUS: IS CAFFEINE INTAKE ASSOCIATED WITH INCREASED RISK OF DEVELOPING CARDIAC ARRHYTHMIAS?

### **ABSTRACT:**

Introduction: Counseling patients to reduce caffeine intake to lower the risk of developing cardiac arrhythmia is common, yet its mechanism is not fully understood. This recommendation may result in an unnecessary decrease in quality of life, reduction in compliance with medical advice, or cessation of potentially beneficial behaviors for patients. In this review, we examine the evidence-based association between caffeine intake and cardiac arrhythmias.

Methods: A total of 717 articles were found in the PubMed database using the keywords "caffeine" and "arrhythmia". The articles were filtered by publication date within the last 5 years, article language English, and age of participants 19+ which reduced the number of articles to 25.

Key Findings: Higher caffeine intake is associated with a lower risk of developing atrial fibrillation (AF) over a 12-year period in the general population. In fact, higher coffee intake is associated with a reduced risk of developing AF in a dose–response manner. Additionally, there is no strong association between increased caffeine consumption and ventricular fibrillation.

Conclusion: Although providers have fallen into the habit of recommending reductions in caffeine consumption to their patient populations, the evidence does not identify any clear positive correlation between caffeine consumption and the occurrence of arrhythmias.

# STRONG COFFEE, WEAK CONSENSUS: IS CAFFEINE INTAKE ASSOCIATED WITH INCREASED RISK OF DEVELOPING CARDIAC ARRHYTHMIAS? - CONTINUED -

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### THE EFFICACY OF THE FIRST FDA-APPROVED TREATMENT (BREXANOLONE) FOR POST-PARTUM DEPRESSION

#### **ABSTRACT:**

Introduction: Postpartum depression (PPD) is a serious condition that has negative impacts on maternal and infant well-being during the postnatal period. The objective of this review is to assess the effectiveness of Brexanolone, a positive allosteric modulator of GABA receptors, in improving PPD symptoms in a timely manner.

Methods: A total of 148 articles were found in the PubMed database using the keywords "postpartum depression" and "Brexanolone". The number of articles declined to 17 after applying the following inclusion criteria: publication date within the last 10 years, article language English, article type clinical trial, meta-analysis, randomized controlled trial, and systematic review.

Key Findings: As compared to placebo, both moderate and severe PPD cases receiving Brexanolone achieve a significantly more rapid reduction in Hamilton Rating Scale for Depression-17 score, with an inconsistent effectiveness through day 30. PPD symptoms are improved significantly only 24 hours after the initiation of the treatment, and women report a positive change in the relationship between mother and child after treatment with Brexanolone. Sleepiness, loss of consciousness, dry mouth, and flushing are common side effects of the medication.

Conclusion: Brexanolone can effectively reduce symptoms of depression following childbirth, especially in urgent mental health crisis events, due to its fast effects.

### THE EFFICACY OF THE FIRST FDA-APPROVED TREATMENT (BREXANOLONE) FOR POST-PARTUM DEPRESSION - CONTINUED -

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### CURRICULUM DESIGN FOR ARMY COMBAT MEDICS TO DECREASE POST-TRAUMATIC STRESS SYMPTOMS

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### UNRAVELING HIV DISPARITIES AMONG LGBTQ+ INDIVIDUALS IN THE UNITED STATES: CHALLENGES AND STRATEGIES

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## EMPOWERING WOMEN IN INDIA – PROMOTING MENSTRUAL HYGIENE THROUGH EDUCATION ON THE BENEFITS OF MODERN MENSTRUAL SUPPLIES

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### POST-PARTUM DEPRESSION: DO ADVERSE CHILDHOOD EXPERIENCES INCREASE RISK?

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### STROKE IN THE YOUNG

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### MENTAL HEALTH DISORDERS IN ADOLESCENTS: DOES ADEQUATE SLEEP AT NIGHT SAFEGUARD MENTAL HEALTH?

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