

A New Trend: How Pharmacists Are Transforming Healthcare

By Jeffrey A. Bates and Marty Larson

In years past, a pharmacist's work centered primarily on medications. However, recently – especially during the COVID-19 pandemic – patient needs have provided opportunities for pharmacists to offer direct patient care. In these roles, pharmacists are pioneering novel approaches to improve patient care experiences, increase the quality of care, and lower the overall cost of healthcare.

In the U.S., it is estimated that about \$40 billion is spent each year on patients who experience medication errors,¹ while up to two-thirds of all adverse drug reactions are considered preventable.² When examining one of the most fragile population groups, it was determined that elderly patients are eight times more likely to be hospitalized due to an adverse drug reaction than younger patients.³

As escalating concerns have risen, pharmacists have demonstrated many ways they can improve and prevent medication misadventures. And as a result, society is finding these efforts to be valuable.

How can patients continue to receive quality healthcare advice from their frontline providers? At Cedarville University's School of Pharmacy, faculty members are impressing on their students – tomorrow's pharmacists – a vision for creatively reimagining healthcare, safely caring well for their patients, improving their quality of life, as well as ensuring optimal health outcomes.

Some pharmacists serve as fully licensed prescribers,



improving patient outcomes and quality of life. Cedarville alumna Dr. Vineeta Rao's role has her serving as a clinical pharmacist on the Outpatient Oncology Palliative Care Team at UNC Medical Center. Patients with cancer are referred to her team for complex symptom management and additional support in coping with advanced illness. She works alongside a close-knit team of physicians, nurses, and a nurse practitioner to optimize medication regimens for outpatients with cancer and troublesome symptoms related to disease or cancer treatment. As a Clinical Pharmacist Practitioner (CPP), Dr. Rao is a fully licensed prescriber under a collaborative practice agreement in North Carolina and frequently sees patients independently to assess symptoms and adjust medication regimens. Dr. Rao manages complex cancer pain for her patients, and she is thankful to be practicing at the top of her license, as her CPP credentialing allows her to prescribe opioids and controlled substances for her patients.

A group of pharmacy providers at CedarCare Village Pharmacy in Cedarville, Ohio – the teaching pharmacy for Cedarville University's School of Pharmacy – have piloted a project where pharmacy staff now have access to their patients' Electronic Health Record (EHR). This access to the patients' entire clinical record is seen as vital to ensuring the highest-quality care. In fact, the facilitators of the pilot project note that "Patient care in the community pharmacy setting is often hindered due to limited access to adequate patient health information (PHI). Various studies suggest that lack of access to PHI is a main reason for delay in pharmaceutical care, medication dispensing errors and lacking interprofessional relationships between prescribers and pharmacists."

These efforts have led to broader discussions in granting pharmacists access to EHR as a way to enhance the quality of patient care, improve the quality of the care they receive, and to prevent hospitalizations due to avoidable medical misadventures.

A Cedarville pharmacy alumna is expanding care for patients in Raleigh, North Carolina through drone delivery of medications, comprehensive medication management in a population health environment, and telehealth visits with her patients. Dr. Danielle Baker serves at Atrium Health in the Wake Forest Baptist health system. In her current role, she oversees pharmacists



and technicians providing care in the ambulatory and population health settings. Just this past year, the pharmacy population health team expanded services to provide care to health care heroes (employees and families) through comprehensive medication management. The pandemic has also expanded our footprint with drone delivery of medications and lab samples as well as telehealth visits.

Another Cedarville pharmacy graduate, Dr. Rylee Uber, serves at Geisinger Health Care by leading research, clinical practice integration, education, and scholarship as they relate to pharmacogenomics. All of these responsibilities fall under the purview of the Geisinger Pharmacogenomics Program, which is led by Dr. Uber. Harnessing pharmacogenomics allows Dr. Uber's team to practice precision medicine, defined as "the practice of integrating a patient's unique characteristics into

clinical care" of patients. Dr. Uber's team works to ensure this vital data is available at the point of care to support superior pharmacotherapy outcomes and quality of life among patients.

The role of healthcare in America continues to evolve, and although the most recent transition was augmented because of COVID, the impact on patient's health is a positive step forward. And Cedarville University's School of Pharmacy is leading the way from a faith perspective.

Located in southwest Ohio, Cedarville University is an accredited, Christ-centered, Baptist institution with an enrollment of 5,082 undergraduate, graduate, and dual-enrolled high school students in more than 175 areas of study. Founded in 1887, Cedarville is one of the largest private universities in Ohio, recognized nationally for its authentic Christian community, rigorous academic programs, high graduation and retention rates, accredited professional and health science offerings, and the #4 national ranking by the Wall Street Journal for student engagement. For more information about the University, visit cedarville.edu.

References

1. Tariq R, Vashisht R, Sinha A, Scherbak Y, Medication Dispensing Errors and Prevention. NCBI, May 2023.
2. McDonnell PJ, Jacobs MR. Hospital admissions resulting from preventable adverse drug reactions. *Ann Pharmacother.* 2002;36:1331-1336.
3. Budnitz DS, Pollack DA, Weidenbach KN, et al. National surveillance of emergency department visits for outpatient adverse drug events. *JAMA.* 2006;296:1858-1866.



In April 2021, Dr. Jeffrey Bates was appointed Dean of Cedarville University's School of Pharmacy after serving as Associate Dean for five years. Concurrently, he serves as President of the Cedar Care Village Pharmacy board of directors. Dr. Bates' career of 30+ years has allowed him the opportunity to recruit, inspire, and equip more than 2,300 pharmacists. He works tirelessly to ensure students' God-given passions and abilities align well, preparing them for a lifetime of patient care. Throughout his career, Dr. Bates has strived to exceed expectations, modeling excellent care and strong servant-leadership.

In the years prior to joining Cedarville, Dr. Bates served at Ferris State University's College of Pharmacy as Assistant Dean and Director of Student Success. While at Ferris, he founded the Ferris Pharmacy Care Clinic in 2013. Located inside Ferris' College of Pharmacy, students regularly hone their clinical skills, assuring comprehensive care to underserved patients in and around Mecosta County. Further, he shared clinical responsibilities in an Interdisciplinary Diabetes Clinic, facilitating experiential and inter-professional learning for pharmacy, optometry, and nursing students.

Dr. Bates is privileged to have been an invited lecturer many times on both state and national platforms. Dr. Bates has helped lead several non-profit organizations, serving on the Board of Directors for the Michigan Pharmacists Association, Hope House Free Medical Clinic, Cran Hill Ministries, and Christian Pharmacists Fellowship International. He has served as a deacon at Grace Baptist Church in Cedarville as well as led committees in the American Association of Colleges of Pharmacy and at the Michigan Pharmacist's Association. Currently, he serves on the Christian Pharmacists Fellowship International Board of Directors and chairs its Educational Affairs Committee.

He and his wife Sheryl are originally from the west-central Michigan area, but are now privileged to call Cedarville, Ohio home. They have three children and one grandchild. Dr. and Mrs. Bates are strong advocates for, and supporters of, foster care and adoption.



Marty Larson is the Chief Operating Officer for the Greater Dayton Area Hospital Association (GDAHA) and its affiliates, Greater Dayton Area Health Information Network and Southwestern Ohio Health Care Association (SOHCA). He is responsible for overseeing the operations including finance, assisting in strategic development and implementation, identifying emerging healthcare technology opportunities for member hospitals, relaunching SOHCA, identifying and addressing health equity opportunities in the region.

Marty has 30 years of experience in healthcare. He held leadership positions in finance, health information technology, and as an entrepreneur. He has served on the Cedarville School of Pharmacy Advisory Committee for 10+ years. He has a passion for impacting the community to address the needs in mental and behavioral health and improve health equity. Marty strives to use his work and life experiences to enhance the work of GDAHA and its community partners.

Marty received his master's degree from Antioch University McGregor in 2005 and undergraduate degree from Cedarville University. He resides in Xenia, Ohio with

Sara, his wife of over 35 years. He has three kids, Lydia, Tabitha, and Noah. Marty's daughters and their families reside in the Dayton area. Noah and his wife live in Denver. Marty has four grandkids whom he adores.

Waiting on the Lord By Teri Miller

"I waited patiently for the LORD; he turned to me and heard my cry." – Psalm 40:1 (NIV)



Waiting. There aren't many Christians – or people, for that matter – who would say they enjoy waiting. Of the many things that we can learn from Scripture, it is that God cannot be rushed and that He will work in His time and on His terms. We can stomp our feet and shake our fists; but ultimately, though incredibly frustrating, our tantrum only results in energy wasted and a delay in our understanding and acceptance of His will. Seeking God while we wait can be a time of rich spiritual growth. A garden grows with careful attention... and time. Ironically,