

Spring 2010

More than a Prescription

Marc A. Sweeney

Cedarville University, msweeney@cedarville.edu

Follow this and additional works at: [https://digitalcommons.cedarville.edu/
pharmacy_practice_publications](https://digitalcommons.cedarville.edu/pharmacy_practice_publications)

 Part of the [Christianity Commons](#), [Other Pharmacy and Pharmaceutical Sciences Commons](#), [Pharmacoeconomics and Pharmaceutical Economics Commons](#), and the [Pharmacy Administration, Policy and Regulation Commons](#)

Recommended Citation

Sweeney, Marc A., "More than a Prescription" (2010). *Pharmacy Practice Faculty Publications*. 73.
https://digitalcommons.cedarville.edu/pharmacy_practice_publications/73

This Article is brought to you for free and open access by DigitalCommons@Cedarville, a service of the Centennial Library. It has been accepted for inclusion in Pharmacy Practice Faculty Publications by an authorized administrator of DigitalCommons@Cedarville. For more information, please contact digitalcommons@cedarville.edu.



More Than a Prescription

by Marc A. Sweeney, Pharm.D.

With the changes to our health care system come opportunities for pharmacists to bring professional innovation and cost-saving measures.

It's no surprise that health care professions comprise half of the top-30 fastest-growing career fields in the United States. In light of recent movements in Washington, health care workers are understandably curious as to how these changes could affect their professions.

As a pharmacist, I can't help but interpret the legislation, in part, through the lens of pharmacy, analyzing the positive or negative influence it could have on the profession. I'm particularly interested in whether my profession will be able to continue its exciting development or be relegated to a more limited role within our health care

system, given the potential for pharmacists to profoundly reduce costs and enhance patient health.

To understand the legislation's impact on the pharmacy profession, we must begin with defining the role of the pharmacist. Traditionally, pharmacists have been viewed as professionals responsible for ensuring the accuracy of dispensed medication, dosage, and dosage form. In other words, pharmacists ensure that a patient receives the medication intended by the prescriber.

Achieving this function could be reasonably, even appropriately, replaced with technology. Existing robotics and computerized management systems certainly represent more cost-effective means than hiring highly trained professionals. Furthermore, by using these technologies in mail-order prescription processing models, patients can receive accurately dispensed medications at their homes in a convenient manner, which certainly eliminates hassle and apparent cost.

Unfortunately, some in the health care debate hold this narrow view of the pharmacy profession and fail to fully understand the implications of embracing this approach. Minimizing the role of pharmacists would lead to serious consequences.

The Scope of Knowledge

What exactly *do* pharmacists bring to the health care system? Based on increased educational requirements and cost-cutting innovation, health care workers and many others recognize the profound benefits of the pharmacy profession to our nation.

The required professional curriculum for colleges and schools of pharmacy now includes between two and four years of prepharmacy coursework followed by a minimum of four years of professional coursework leading to a Doctor of Pharmacy degree. Almost one-third of the professional curriculum involves off-campus clinical training focused on evaluating and managing complex medication therapy regimens. In addition to learning in-depth information and application of medication

therapy, students study patient assessment, pathophysiology, disease management, preventative medicine, health economics, methods to improve overall health, and the complexities of non-prescription medications. Many pursue postgraduate training in residencies and fellowships to improve their clinical skills or to specialize in areas like cardiology, oncology, pediatrics, or geriatrics.

Clearly, the scope of pharmacy training has expanded well beyond the *accuracy* of prescriptions to the *appropriateness* of prescriptions. The changes to pharmacy curricula over the past 100 years were not made without due cause. The profession has evolved to include both science and art of practice, which cannot be replaced by automation.

A Model for Savings

Research indicates that the expanding roles of pharmacists can reduce the cost of health care. When speaking at the American Medical Association's annual conference in June 2009, President Obama discussed the need to pursue excellent health care practice models and highlighted pharmacists as major resources to reduce costs. As an example, he cited the Asheville Project in North Carolina, where pharmacists were empowered to provide Medication Therapy Management (MTM) services to patients. MTM involves the pharmacist working with both the patient and physician to monitor the effects of medication therapy and to recommend changes when they are needed. Between 1997 and 2001, direct medical costs in Asheville were reduced by \$1,200–\$1,800 per patient per year when compared to baseline costs. This model has been repeated in cities around the nation with similar results and is now considered a proven model. Proper medication use is the key to reducing hospitalizations, improving care, and reducing costs for treatment of chronic disease, which costs approximately \$1.3 trillion annually in the U.S.

Inappropriate medication use costs an estimated \$177 billion annually. There are more than 10,000 prescription medications and more



than 30,000 non-prescription medications currently on the market in the United States. Approximately two-thirds of the population receives at least one medication per year, and almost 40 percent of people receive four or more medications. Only about 50 percent of patients take their medications appropriately, and 96 percent fail to ask any questions about how to use their medications. At least 1.5 million preventable adverse medication events occur in North America each year, at an estimated cost of \$136 billion annually. The complexity of these events has increased with the rise of alternative therapies, as one out of every four people uses them incorrectly.

For every 10 people who take a prescription, one person will seek medical attention because of an undesired medication effect. A 1995 study demonstrated that \$76 billion each year could be saved and 120,000 deaths prevented if pharmacists were used to a greater extent within the health care system. Given these statistics and projections, pharmacists may be one of the most significant contributors to resolving the national health care dilemma. Many citizens may not even recognize the advantages of having an easily accessible health care resource in their communities.

Will the national health care reform plan affect the need for pharmacists? The new legislation includes provision of MTM services to patients, creating an opportunity for pharmacists to play a greater role in patient care. Pharmacists could be reimbursed for their assessment and medication management of patients. Based on the past 20 years of research, the more pharmacists play an active role in a patient's assessment of medication effectiveness, the more counseling and discussion will occur regarding medication use. In turn, patients will learn important strategies to improve health, leading to a reduction in health care costs and hospitalizations.

In the Asheville Project — where pharmacists were proactive in engaging patients — health care costs did not increase for an entire decade, something that is hard to imagine in our current system. The model demonstrated improved care, reduction of costs, and a more efficient use of resources.

A Platform for Service

As the field of pharmacy continues to expand, we will see a rise in the need for well-trained, forward-thinking pharmacists. To help meet this demand, Cedarville University launched its school of pharmacy in fall 2009 to prepare students to implement innovative health care models. In effect, our students will be equipped to play significant roles in reducing health care costs and improving patient care. This motivation on the part of our faculty and students stems from a desire to serve God in a way that changes the world. Rather than being driven by peer recognition, monetary rewards, or even professional satisfaction, our deep love for God compels us forward.

Four themes characterize the direction of Cedarville's school of pharmacy. The first is *Christ-centered service*. Believing that every Christian is called to serve others as a reflection of Christ's example and commission, the faculty encourage each student to view his or her role as an opportunity to touch lives, not just earn a paycheck.

The second theme is *patient safety*. The financial and health effects of adverse medication events and misuse are well-documented. By training the next generation of pharmacists, Cedarville promotes advances in this arena, helping both the profession as well as those served by the profession.

The third theme is *personalized therapy*. Pharmacogenomics — which is basing medication selection and/or dosing on the patient's genetic metabolic make-up — enables health professionals to develop more precise treatment programs and allows Cedarville to equip pharmacists for maximum benefit while helping to address the rising cost of health care.

The fourth, *informatics*, reflects Cedarville's extensive computer resources and reputation as a leader in technology integration. Pharmacy graduates will utilize some of the latest instructional and pharmacy tools in their education and be challenged to become technological innovators as they enter the pharmacy profession.

With potential changes to the health care system come increased opportunities for greater leadership and service within health

professions. We need men and women of character who can tackle the challenges, embrace the opportunities, and serve their communities and neighbors with the love of Christ. We are confident that graduates from Cedarville's school of pharmacy will be prepared to exemplify to their colleagues and their nation the level of engagement, service, and passion that could not only radically transform our health care system but also make an eternal difference in their patients' lives. ■

Dr. Marc Sweeney serves as dean of the school of pharmacy and professor of pharmacy practice at Cedarville University. He received a B.S. in pharmacy from Ohio Northern University, a Pharm.D. from The Ohio State University, and an M.Div. from Southwest Bible College and Seminary. He has served at Cedarville since 2008.



Guard Your Heart

by Pastor Bob Rohm, Vice President for Christian Ministries at Cedarville University

According to the Center for Disease Control and Prevention (CDC), heart disease is the leading cause of death for both men and women in the United States. In the U.S., someone has a heart attack every 34 seconds. Every minute someone dies from a heart-related event. In 2009, heart disease alone cost our country \$304.6 billion. The CDC reports that the major heart disease factors are inactivity, obesity, high blood pressure, cigarette smoking, high cholesterol, and diabetes.

These are sobering facts. But there is a far more important heart issue that we should be concerned about. Proverbs 4:23 says, "Above all else, guard your heart, for it is the wellspring of life." We cannot ignore this life-and-death prescription.

The writer of Proverbs 4 is not concerned with the fist-sized cardiac organ located in the cavity between our lungs. He is talking about our innermost being made up of our mind, will, and emotions. This is that part of us that makes up our character and our spiritual intimacy with God as members of His family. In addition, this is the place where we acknowledge and receive or reject the salvific call of God.

Romans 10:9–10 says, "If you confess with your mouth that Jesus is Lord and believe in your heart that God raised Him from the dead, you will be saved. For with the heart one believes and is justified, and with the mouth one confesses and is saved."

A guarded heart is a redeemed heart. A guarded heart is a healthy heart — and a healthy heart is just what the doctor ordered!