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# Remington: The Science and Practice of Pharmacy

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the magnitude of the drug-related morbidity and mortality problem and affirming the need for improvement in medication management. Disease prevention and patient education as ways to reduce overall medical and prescription costs.

Community pharmacists are in a position to fulfill this societal need and provide pharmaceuticals and pharmaceutical services with the intention of improving patient health outcomes. They have the education and ability to manage drug therapy and provide prevention and education services to patients. Moreover, pharmacists are the most accessible and trusted health-care professional. The 1995 Report of the Pew Health Professions Commission supports pharmacists fulfilling these alternate roles and recommends that pharmacists, in particular, engage in activities related to comprehensive drug therapy management, such as selecting appropriate drug therapies, educating and monitoring patients, and continually assessing therapy outcomes.<sup>12</sup>

## PHARMACEUTICAL CARE

In response to our societal need for medication management, community pharmacists are beginning to assume the additional responsibility of increasing the effectiveness of drug therapy through the provision of pharmaceutical care. They are shifting from a dispensing focus, which emphasizes the drug product, to a patient-oriented focus, which emphasizes proper use of drug therapy for the patient. Although pharmacists have always provided patient care, the care was not systematic and consistent, it was not documented, and it was reactive.<sup>13</sup> Alternatively, pharmaceutical care necessitates a proactive health-care provider who assumes interactive and participatory responsibilities with the intention of improving outcomes. This is reflected in the definition of pharmaceutical care by Hepler and Strand.<sup>7</sup>

“Pharmaceutical care is the responsible provision of drug therapy and other patient care services for the purpose of achieving outcomes related to the prevention or cure of a disease, the elimination or reduction of a patient’s symptoms or the prevention, arrest or slowing of a disease process. It involves the process through which pharmacists in cooperation with the patient and other health-care professionals design, implement, and monitor a therapeutic plan that will produce specific therapeutic outcomes for the patient and improve the patient’s quality of life.”

Embracing this new practice philosophy is one issue; actually implementing it in community pharmacy is another. Fortunately, innovative leaders in the profession have been developing new practice styles, modifying their work environment, and providing patient-centered care in an effort to change the practice paradigm.

As role models and practice models emerge, community pharmacists are slowly providing pharmaceutical care services. Many of these services can be categorized as therapeutic interventions, health screenings, prevention and wellness services, and disease management activities. The findings of the 1998 National Community Pharmacists Association (NCPA) Searle Survey of independent pharmacists, as shown below, provide some evidence that community pharmacists are engaging in pharmaceutical care activities.<sup>14</sup>

- 74% offered nutrition services.
- 56% offered blood pressure monitoring.
- 48% offered diabetes training.
- 42% offered health screenings.
- 36% offered asthma training.
- 30% conducted patient education programs.

Furthermore, contemporary community pharmacy practitioners are discovering that providing comprehensive patient care is more satisfying than only dispensing medications. Thus, while the prescription and nonprescription drug products are still the preeminent domain of community pharmacy, the patient-centered approach is diffusing throughout community practice settings and advancing the profession.

## Changes to Support Pharmaceutical Care

Implementing pharmaceutical care has been a challenge for community pharmacists. There have been regulatory, technological, educational, and reimbursement issues that have hindered the rapid adoption and diffusion of this new paradigm.<sup>4,15,16</sup> Moreover, the public generally recognized community pharmacists as business people and less as health-care professionals. Despite these difficulties, pharmacists in community settings are overcoming these limitations and are implementing pharmaceutical-care activities. Pharmacy organizations, educators, regulators, and practitioners have concentrated their efforts and advocated changes to help advance community pharmacy.

### REGULATORY CHANGES

Most state boards are in the process of or have completed full revisions of their pharmacy practice acts to expand the role of pharmacists.<sup>17</sup> These changes have given pharmacists the opportunity to engage in innovative practices and to promote patient health. Of specific importance are the regulatory changes that allow for Collaborative Practice Agreements between pharmacists and physicians. Many pharmacists who provide pharmaceutical-care services view such an agreement as the next logical step to the expansion of their professional role. Collaborative practice agreements between pharmacists and physicians enable pharmacists to initiate, monitor, and manage a patient’s drug therapy, usually within the parameters of an agreed upon treatment protocol. The agreements permit them to authorize prescription renewals, change dosages, administer immunizations and initiate certain types of drug therapy without waiting for physician approval. According to the National Association of Boards of Pharmacy (March 1999), at least 24 states have approved collaborative practice arrangements that grant varying degrees of authority to pharmacists.<sup>18</sup> Furthermore, pharmacists are collaborating with physicians informally in states where no such legislation exists.

As a result of these formal and informal arrangements, pharmacists are increasingly working with physicians to enhance their roles as providers of health care. Collaborative practice agreements allow pharmacists to extend the provision of pharmaceutical care to the actual management of various therapies for patients.

### TECHNOLOGICAL CHANGES

Software and technology to support the provision of pharmaceutical care are now in the marketplace.<sup>17,19</sup> First, professional pharmacy organizations and pharmacy leaders have worked with computer vendors to give pharmacists the software they need to provide pharmaceutical care. One example is a pharmaceutical-care package called Guardian Plus marketed by CarePoint (Charleston, SC). It is a Windows-based system that supports pharmacist intervention documentation and disease management initiatives. It is now integrated into the dispensing software to allow expanded focus on patient care using a single set of patient data. Pharmacists are using these