

Compounding Pharmacy

Holland Code: RCI

Background

Compounding pharmacy may be defined as practicing the duties of a pharmacist with an emphasis on preparing customized dosage forms and/or prescription medications to meet an individual patient's or physician's needs. Because every patient is different and has unique needs, customized medications are a vital part of quality medical and patient care. Today, compounding is also addressing the needs of veterinarians, dentists, and their patients.

Compounding prescription medications was a common activity in pharmacy prior to the advent of manufactured medicines in the 1960s. There has been a "rebirth" of compounding in the past decade because of the need for specialized medications for individual patients. A pharmacy compounding provision was attached to the Food and Drug Administration Modernization Act of 1997 recognizing the importance of compounding and providing for its continued practice. Recent concerns about appropriate and safe compounding practices have been addressed in draft legislation by sectors of the government.

The basis of the profession of pharmacy has always been the "triad": the patient physician-pharmacist relationship. Through this relationship, patient needs are determined and decisions are made about treatment regimens, which may call for a compounded medication, including but not limited to:

- *Medications that are not commercially available*—Manufacturers must be ensured that there will be a return on their investment when entering the marketplace with a drug product. Therefore, limited chemical forms, dosage forms, strengths, flavors, and packaging are available for the physician to prescribe and the pharmacist to dispense. Compounding allows the physician to prescribe a custom-tailored medication that is not available commercially.
- *Medications that are not stable*—Pharmacists prepare small quantities of a prescription more frequently to ensure stability of the product for its intended use.
- *Altered commercially available medications*—Physicians prescribe a commercially available medication in a different dosage form to meet a specific patient need and ensure patient adherence. For example, a patient may be allergic to a preservative or dye in a manufactured product for which compounding pharmacists can prepare a dye-free or preservative-free dosage form. Some patients have difficulty swallowing a capsule and require a troche or lozenge. Many pediatric patients are non-adherent because their medications are bitter, but become adherent when the medication is flavored to their liking.

No health care professionals, other than pharmacists, have studied the physical and chemical compatibilities of medications and can prepare extemporaneous dosage forms. Even when modern scientific technologies have produced new chemical entities, the ability to combine one or more chemicals into a new preparation, or process the existing dosage form into one that is better suited to the patient's needs, has remained the domain of the pharmacist. The right—if not the obligation—to compound exists under the pharmacy laws of each of the 50 states and is pervasively regulated by the states. Many schools and colleges of pharmacy, as part of their core curriculum, instruct student pharmacists on the compounding of pharmaceuticals.

Respondents indicated that they spend 29% of their time compounding. This is followed by 18% in the role of medication dispensing (including associated counseling). Thirteen percent of their time is spent on business management and another 13% on medication management services (where the unit of focus is on medications). In describing the appeal of such a practice, one respondent summed it up as “working extremely close with physicians to find the best therapy options for our patients.”

Characteristics

Sixty-seven percent reported having a bachelor's degree in pharmacy, with 41% having earned a PharmD degree. Another 8% reported having an advanced degree (MA, MS, MBA, PhD, or other) with an additional 16% earning a non-pharmacy BA or BS degree. Fifty-nine percent reported having achieved a certificate for special training, and 26% reported completion of a residency. The mean age of these respondents is 53 years, with 67% being male. More than half (67%) reported that they are in management.

Income data show that of those that responded, 25% earn between \$120,000–\$130,000, 25% earn greater than \$150,000, 42% earn between \$100,000 - \$120,000, and only 8% earn less than \$80,000 per year. The average time worked per week was 36 hours. Compounding pharmacists enjoy their area of practice: 53% are “extremely” satisfied and 35% are “somewhat” satisfied. Only slightly different is their response regarding their level of challenge in this career path. A majority (65%) are extremely challenged, with 35% reporting they are somewhat challenged.

Insider's Perspective

What aspects of the job are most appealing?

These are “people” pharmacists. A large number of respondents indicated “interaction with people”/“direct patient care” as the most appealing aspect of this practice area. One respondent stated, “I actually help patients fix the issues they present.” Another enjoyed the ability to “employ all areas of science.”

What aspects of the job are least appealing?

In contrast to the most appealing aspects, only one item seemed to resonate with some of the respondents. A couple listed “difficult patients” as the least appealing. Concerns also were expressed about insurance issues. Given the unique customized nature of the products they compound, third-party reimbursement problems may be greater for these pharmacists than other practitioners.

What advice should students and practitioners consider when selecting the option of compounding pharmacy?

Compounding pharmacists indicate that they are passionate about their work. One stated,

“I’ve never met an unhappy compounding pharmacist.” Another indicated the importance of being a people person as “you deal with people every day.” One respondent had a slightly different take in that one must be “willing to work in a team with other health care professionals.”

A respondent who focuses more on the nonhuman aspects of compounding stated, “I consult and provide medications for lab animals. I have daily interactions with lab animal veterinarians and preclinical researchers.”

Adapted from the American Pharmacists Association