An Update on Community Pharmacy Practice in the United States

Eric J. MacLaughlin¹, Eiichi Akaho*², Mitsuko Hirai¹, Hiroto Kambara² and Koichi Kawasaki²

Pharmacy Practice, Texas Tech School of Pharmacy and Visiting Professor of Kobe Gakuin University¹
Faculty of Pharmaceutical Sciences and High Technology Research Center, Kobe Gakuin University²
Tokyo Metropolitan University of Health Sciences³

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There are several types of community pharmacies in the United States. The most common are independents, chains, and supermarket pharmacies. There are pharmacies that specialize in home healthcare supplies/devices, compounding, and infusions. Currently, there is a great shortage of pharmacists in the United States, and as a result salaries are high (2002 median salary was ¥9.5 million). Pharmacy rules and regulations are quite different in the United States. One “prescription” is usually one medication order. Additionally, there are no limits on the number of prescriptions one pharmacist may fill per day. Many pharmacists are starting to provide direct patient-care services. These clinical services may include cholesterol screenings, manual blood pressure measurements, hemoglobin A1C testing, blood glucose testing, osteoporosis screenings, vaccinations, and many others.

Community pharmacy practice is changing quickly in the U.S. With the current shortage of pharmacists, and large prescription volume, pharmacies will be challenged to provide for the medication needs of their patients. While direct patient-care services are increasing in community pharmacies, many challenges will need to be overcome before their provision becomes widespread.

Key words — community pharmacy, refill, prescription, reimbursement process, direct patient-care service

Introduction

The practice of pharmacy in the United States is in a rapid period of change. Indeed within the last couple of decades, the profession has seen numerous significant changes, most of which have contributed significantly to further the professional development of pharmacy.

One area in particular undergoing major changes is community pharmacy practice¹. Within the last two decades, community pharmacy (a.k.a. “retail” pharmacy) has seen several changes. These changes include a significant increase in pharmacist shortage, prescription volume, and pharmacist salaries. Additionally, newer developments that have started to become a reality include the provision of direct patient care.

The purpose of this paper is to provide an update on the practice of pharmacy, focusing on the community setting. Objectives of this paper were to describe the various types of community pharmacies in the United States, describe the pharmacy license and prescription requirements, understand the prescription reimbursement process², describe current patient care services that are being provided in many community pharmacies, discuss challenges to providing direct patient care, and discuss future directions for community pharmacy practice.

1. Types of Community Pharmacies in the United States

In the United States, there are several different types of community pharmacies. These include independent pharmacies, “chain” pharmacies, grocery store (supermarket) pharmacies, and various specialty pharmacies. The following is a brief description of each type.

Independent pharmacies are those that are privately owned and operated, by either one individual, or perhaps by several as a partnership. Within the past several years there has been a significant decline in the number of independently owned pharmacies. In 1991 there were 30,503 independent community retail pharmacies (National Association of Chain Drug Stores, URL http://www.nacds.org/Accessed 10/04/02). Ten years later in 2001, the number of community retail pharmacies that were independently owned and operated was 20,647. However, within the past 3 years, the number of independent pharmacies has stayed relatively stable, currently approximately 24,500 stores nationwide (National Community Pharmacists Association, URL https://www.ncpanet.
pharmacists choose to work part time. While most pharmacists work approximately 40 hours per week, the time worked often varies between day (e.g., 8 AM to 4 PM) and night shifts (e.g., 2 PM to 10 PM). For instance, a full-time pharmacist may work 3 day shifts and 2 night shifts during one business week (Monday through Friday). Additionally, most community pharmacists work 1 or 2 weekends a month. One weekend generally consists of an 8 hour work day on Saturday and Sunday. Typically, if a pharmacist works on the weekend, they receive days off during the business week to compensate for those hours worked.

3. Women in the Profession

Traditionally, pharmacy had been viewed as a male profession in the United States. Indeed, when one thought of the "druggist", many people thought of an older gentleman compounding a prescription. However, this traditional view is quickly changing as more women are entering the field of pharmacy. In 1970, women pharmacists accounted for 13% of the workforce. Currently, women make up slightly less than 50% of full-time pharmacists, and approximately 60% of part-time pharmacists. One factor that may be driving the increase in women graduates, is that women may be more likely to elect to work part-time. Thus, this trend of increasing women in the profession is likely to continue.

One challenge that the United States currently faces is a pharmacist shortage. From 1998 to year 2000, the number of vacant positions grew from 2,700 to approximately 7,000 (National Association of Chain Drug Stores, URL http://www.nacds.org/Accessed 10/04/02). Unfortunately, this increase in shortage of pharmacists has occurred at the same time the number of prescriptions dispensed has increased. For instance, from 1992 to 1999, retail prescriptions dispensed in the United States rose by 44%. Unfortunately, the pharmacist shortage problem will likely continue, as the population continues to age and as "baby boomer" pharmacists (those born in the late 1940's and early 1950's) begin to retire. Additionally, as more women enter the pharmacy workforce and elect to work part-time for family reasons, the number of full-time-equivalent pharmacists will likely decrease. Pharmacy workforce and prescription statistics are shown in Table 1.

Due to the shortage of pharmacists, pharmacist salaries have risen significantly. Data from 1992 to 1998 show that income growth has continued steadily at about 4%, with chain pharmacies offering higher salaries than independents or hospitals6. In the spring of 2002 the median earnings for pharmacists was ¥9.9 million ($78,600) (Pharmacy Week, URL http://www.pharmacyweek.com/salary/spring2002/default.asp Accessed 10/29/02; The Universal Currency Converter, www.xe.com, URL http://www.xe.com/Accessed 10/09/02). However, current salaries are likely even higher, with the an average starting retail pharmacist salary of approximately ¥9.9-11.1 million ($80,000-90,000), and the average hospital pharmacist salary of approximately ¥8.1-8.7 million ($65,000-70,000), as shown in Table 2.
4. Pharmacy Rules and Regulations

In order to obtain a license to practice pharmacy in the United States, the prospective candidate must have first graduated from an accredited school of pharmacy. The candidate must also pass the board exam (North American Pharmacist Licensure Examination™ [NAPLEX®]) and the state law exam in the state which the applicant wishes to obtain a license. The exception to this rule is California and Florida, which have separate board exams. There is a process by which foreign graduates may obtain a U.S. pharmacy license. A foreign pharmacist may apply for a Foreign Graduate Examination Committee (FGEC) Certification. This certification provides a means by which the educational equivalency of a foreign pharmacist or graduate may be assessed:

Pharmacy rules and regulations in the United States can often be complicated. One reason for this is that each state has their own Board of Pharmacy, with different rules and regulations. The federal government does have pharmacy rules and regulations which must be followed at federally owned facilities (e.g. United States Veteran’s Affairs Hospitals, Indian Health Service [IHS] facilities). However, these federal laws often are not the same as individual state laws. Thus, when the state and federal laws are not the same, the stricter of the two rules is followed. In most cases, this tends to be the state law.

By law, prescriptions must be dispensed by pharmacists. Unlike Japan, almost all prescription medications are dispensed by pharmacists. Unlike Japan, almost all prescription medications are dispensed by pharmacists. Unlike Japan, almost all prescription medications are dispensed by pharmacists.
pensed by pharmacists. Rarely do physicians dispense prescriptions. In most cases, if a physician dispenses, it is in the form of prescription "samples", which are provided to the physician clinic at no charge by a pharmaceutical manufacturer, and given free to the patient. By law, physicians may not charge the patient for prescription samples.

The word "prescription" has different meanings in the United States and Japan. In Japan a "prescription" may contain several medication orders; most "prescriptions" in the United States consist of only one medication order. Thus, when one refers to the number of "prescriptions dispensed", this generally means number of individual medication orders filled.

Most states have similar laws regarding prescriptions requirements. In order for a prescription to be valid, it must contain the following items: patient name, date the prescription was written, directions (often using Latin abbreviations), quantity, number of refills (up to one year is allowed by most states for non-controlled substances), physician signature, and the name, address, and phone number of clinic from which the prescription was written.

In addition to required items on prescriptions, there are labeling and packaging requirements. First, all prescription medications must be dispensed in a separate package or bottle (with child-proof lids unless the patient requests the non-safety type). Each prescription (individual medication) must have a label, which includes the following information: prescription number, patient name, prescriber's name, date filled, directions, medication name and manufacturer, number dispensed, number of refills, drug lot number and expiration date, pharmacy name and telephone number, initials of the pharmacist who filled the prescription, and any additional warning labels which are specific for that medication. The prescription provides a total of 7 months (210 days) of therapy (one month for the original, plus an additional 6 months for refills), when a prescription is for a 30-days supply (1 month) and has "6 refills". By dispensing prescriptions separately and with an individualized label, identification of individual medications is simplified, and the likelihood of confusing medications with resultant errors may be decreased. In patients who have more complicated drug regimens, often times a prescription "organizer" is recommended to assist the patient in maintaining compliance with their drug therapy regimen.

As to keeping of the original prescription, when a pharmacy fills a prescription which has refills, the pharmacy inputs this information into the computer, and files the original prescription. Each state has different laws regarding the length of time the original prescription is good for.

5. Prescription Reimbursement and Pharmacy Profit

A major difference between the reimbursement process in the United States compared to Japan is that universal medical coverage does not exist for all U.S. citizens. Most citizens have private insurance, usually purchased by their employer. Thus, a further complicating process for prescription reimbursement is that some patients pay out-of-pocket for their prescriptions, while others have the majority paid by private insurance. For patients who do have insurance coverage, patients usually have a co-pay, which may differ depending on whether the particular drug is on the insurance company formulary (if one exists), or if the medication is generic or brand. For example, the prescription co-pay for a generic "preferred drug" may be fixed at $5 ($7.99), while the co-pay for a brand-name drug may be set at $20 ($2480). The United States does not have one standard method by which the cost of medications are calculated, thus reimbursement rates will often differ between various insurance companies and/or pharmacies. Additionally, the patient co-pay will often vary between various insurance companies. All pharmacies submit the prescription claims via computer modem. Thus, the status of prescription coverage as well as the patient's co-pay is known within seconds.

The reimbursement process for prescriptions in the United States is much different than in Japan. Reimbursement from third-party payers (private or government insurance) is based on two components: the cost of the medication (usually Average Wholesale Price minus 10-15%) and a small dispensing fee (e.g., ¥500-$750 [$4-6]). Additionally, there is usually a "minimum fee" for dispensing a prescription (e.g., ¥1,000 [$7.99]) for non-insured patients. For example, if the cost of medication is very inexpensive (e.g., ¥50), the total charge for the prescription to a non-insured patient would still be ¥1,000.

An increasing problem in the United States is a continuing decline in reimbursement rates to pharmacies. As medication costs escalate, insurers are continuously searching for methods by which they can decrease costs. One of those methods is by decreasing the reimbursement rates for prescriptions. Unfortunately, some of these insurance plans will not provide adequate reimbursement to the pharmacy. Therefore, some pharmacies refuse to accept certain prescription insurance plans.

Finally, a major difference in the reimbursement methods between Japan and the United States is that pharmacists are not reimbursed for various cognitive services such as patient counseling, taking a patient history, physician consultations, and identification of various drug-related problems (e.g., drug-drug interactions, drug overdose, etc.) in the United States. Pharmacists are required to prospectively review patient medication records prior to dispensing a prescription and to offer counseling to patients; however they do not receive additional remuneration.

6. Providing Direct Patient Care

Pharmacists are the most widely accessible healthcare professionals in the United States. With approximately 200,000 pharmacists, patients with chronic disease see their pharmacists five times more than any other health care professionals. Thus, pharmacists are in an ideal position to provide direct patient care.

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7. Challenges to Overcome

There are several challenges to overcome before these various clinical care services are provided by all pharmacies. The first challenge is the lack of time. Pharmacists are generally very busy in traditional services such as dispensing medications, performing drug-regimen reviews, and patient counseling. Thus, it is difficulty to free-up time for pharmacists to take on these additional patient-care services. As further utilization of pharmacy technician services and automated technologies become more available, hopefully this will allow pharmacists time to do these types of clinical services.

Another challenge to overcome is pharmacist training. Not all pharmacists have equivalent training or experience in various disease states or patient care services. Thus, many will need to have further training or education before they are able or qualified to provide certain clinical services. For pharmacists, to obtain extra training or certifications to perform patient care services depends on the type of patient care services being provided, and whether or not there are State-specific laws requiring this. For example, in order for pharmacists to give injections (e.g., vaccinations), they must have training and become certified. However, for other services (e.g., blood glucose testing, blood pressure measurement, etc.), there are no specific certification requirements and pharmacists may perform such services if they have the technical knowledge and skills.

One other barrier to providing direct patient care is lack of monetary resources. Additional investments are often needed before pharmacists can provide various services. This includes money for additional training, to purchase equipment (e.g., cholesterol testing machine, hemoglobin AIC machine, blood pressure testing tools, etc.), and often remodeling of the physical structure of the pharmacy (e.g., building separate patient care rooms which ensure privacy).

Other health-care professional acceptance is another challenge that needs to be overcome. Often, physicians may be reluctant have pharmacists participating in such patient care services. Many times they may feel that the pharmacist is intruding upon their expertise and role as a physician. However, the pharmacist's role is not to replace the physician, but to assist the physician in the care of the patient. The pharmacist's primary role in such services is to educate the patient, screen for diseases, and communicate these results to the physician; not to diagnose. The goal of these services is to work as a health-care team to improve the care of the patient. Thus, once physicians realize the assistance pharmacists may provide them, they are often much more receptive.

One of the largest barriers to providing direct patient care services is that insurers are not mandated to reimburse pharmacists for cognitive services. Therefore, unless there is a private contract between an employer and the pharmacy, patients most often have to pay out-of-pocket for services provided by pharmacists. As discussed earlier, pharmacists have traditionally been viewed by the public as providing primarily distributive functions, and thus are currently not recognized by third-party payers as health care providers who can bill for cognitive services. However, it is hoped that pharmacists will become legally recognized. Currently two bills have been introduced in the United States Congress (S.974 and H.R.2799) which would guarantee this status. Until pharmacists are recognized by third-party payers as health care providers, it is unlikely that these clinical services will be available in most pharmacies in the United States.

The community pharmacy practice is changing quickly in the United States. As the population continues to age and the number of prescriptions increase, it is likely that there will be a large shortage of pharmacists and resultant increases in salary for several years to come. In addition to changes in the pharmacy workforce, changes are occurring in the areas of a pharmacist’s scope of practice. Many pharmacists are starting to provide direct patient care services, aimed at screening and education of common diseases. While the number of pharmacists providing such services is increasing, several challenges need to be overcome before
such direct patient care services are available in all pharmacies.

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