

Adapting Pharmacy Services to the Needs of Managed Care

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The impact of healthcare reform discussions and the growth of managed care continue to challenge the traditional practices of many healthcare professionals. Over the last few years, independent physicians have begun to leave private practice to become employees of hospitals, health maintenance organizations (HMOs), and other health provider groups. Managed care organizations now deliver patient care directly by utilizing staff model HMOs or by purchasing physician practices. The impact of government legislation on Medicare and Medicaid programs has influenced the process of healthcare delivery. Newer methods of reimbursement, such as capitation and risk-sharing, have augmented traditional fee-for-service arrangements.

In this rapidly changing healthcare industry, the pharmacy profession has been challenged to redefine its mission. This redefinition will most certainly involve additional training, reengineering, and most importantly, a re-orientation of the profession itself.¹ This article will offer some insights into the necessary changes and new roles for pharmacists as the profession responds to the challenges and opportunities of managed care. The continuing evolution of pharmacy will necessitate that pharmacists take an active role in assuring that desired therapeutic outcomes are achieved. This will require that pharmacists go beyond the processing of prescriptions and take direct responsibility for the management of drug therapy. In order to accomplish this goal, pharmacists will remove themselves from dispensing and distributive functions and leave them to technicians and technologies.

The future pharmacist will be a counselor, teacher, and advisor of patients. The primary role of the pharmacist will be to optimize drug therapy by taking an active role in monitoring of patient compliance, adverse effects, and therapeutic end points. The emerging new roles for pharmacists will require curricular changes in the way pharmacists are educated. New courses incorporating training in physical assessment, behavior modification, psychology, therapeutic outcomes, and cost effectiveness will become increasingly important in the educational process. Development of these areas in conjunction with traditional drug knowledge will create new opportunities for tomorrow's pharmacists.

A Profession in Transition

Historically, pharmacy school graduates defined their practice in terms of location—hospital, retail, or industrial pharmacy. Now skills once unique to the hospital pharmacists are employed in the retail practice of home healthcare pharmacy. Many hospitals have retail-like pharmacies and retail pharmacies are providing parenteral services once unique to hospital practice. Clearly the practice of pharmacy can no longer be described by the site where it is practiced. Table 1 illustrates the expansion of the roles of pharmacists during the last 15 years.

The traditional role of the pharmacist as dispenser of medication is inconsistent with outcomes-based healthcare delivery. The definition of the pharmacist as "one who is licensed to prepare and dispense drugs and compounds and is knowledgeable concerning their properties"² has been challenged by the growth of managed care. In both community and hospital settings, the functions of preparing and dispensing medications have been delegated to or automated by one or more of the following:

- pharmacy technicians and other support personnel
- fully automated dispensing systems
- patient-ready drug packing systems

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- computer controlled robotics
- innovative packaging by pharmaceutical companies (eg, unit dose packaging)

With proper quality control systems and quality assurance processes, there is no indication that the accuracy of the preparation and dispensing process will be compromised through the use of these less costly resources. The pharmacist will, however, continue to be the most accessible source of drug and treatment information for patients, physicians, and other healthcare personnel. The challenge faced by the pharmacy profession will be to deliver this knowledge in a variety of healthcare models, with the universal goal being to attain measurable outcomes cost-effectively.³

The Vision of Future Roles for Pharmacists

Pharmacists have already taken on new roles with the growth of managed care. In addition to providing quality assurance for dispensing systems, patient education, and monitoring of therapy, pharmacists have found career opportunities in healthcare administration. Other emerging new roles for pharmacists that will require additional education and training include information systems development, sales and marketing, prescription benefits management (PBM), and reporting and analysis experts for PBM companies and physician/hospital systems. Table 2 illustrates how many of the current administrative roles will transfer to the era of managed care pharmacy.

If the pace of change in healthcare continues at present levels, the role of pharmacists by the year 2000 will have been substantially expanded. The following examples discuss some of the possible new roles and responsibilities. It is important to understand that an

individual pharmacist may have responsibilities in more than one of the following roles.

Distributive Quality Control Pharmacists: While the overall amount of dispensing and distribution of drugs by pharmacy technicians and robotics will increase, pharmacists will continue to oversee quality assurance and control systems in all dispensing processes. Pharmacists will be primarily responsible for assuring appropriate drug therapy, patient education, and patient monitoring. The removal of the pharmacist from dispensing functions might well lead to a physical separation of the distributive function of the drug from the patient education and monitoring process. This in turn may lead to drug delivery and patient education telecommunications.

Protocol and Formulary Management Pharmacists: Pharmacists specializing in these areas will assist in the design of treatment protocols and the evaluation of drug formulary additions, providing the healthcare community with cost-effective treatment plans. Present-day drug utilization reviews will be replaced by disease outcomes reviews conducted by these specialists. The policy of disease management, whereby the focus becomes managing the disease associated with the drug, will be another responsibility. Benchmarking processes and analyzing prescribing patterns of individual physicians will be among the quality improvement processes used by formulary management pharmacists.

Consultants to Prescribers: While pharmacists will continue to serve in traditional consultant roles, new consultant roles will emerge in the following areas:

- INFORMATION MANAGEMENT COMPANIES (PHARMACY/MEDICAL DATA INTEGRATION).

Healthcare economists and analysts expect that those organizations with the most sophisticated and fully integrated information systems will probably be the most successful providers of the future. Pharmacists will need to be involved in the development of the most appropriate software to obtain clinical and financial data to analyze. Many large healthcare information technology companies have evolved over the last few years that develop both hard-

Table 1. The Growth of Pharmacists' Roles, 1980-1995

1980	1990	1995
Community	Community	Community
Hospital	Hospital	Hospital/Health System
Industry	Industry	Industry
Education	Education	Education
Long-term Care	Long-term Care	Long-term Care
Consultant	Consultant	Consultant
	Home Infusion	Home Infusion
	Health Maintenance Organizations	Prescription Benefits Management
	Mail Order Pharmacy	Benefits Consultant
		Disease Management Company
		Mail Order Pharmacy
		Health Maintenance Organizations
		Information Management

ware and software to integrate and assess all health system delivery processes.⁴

- **DISEASE OUTCOME ORGANIZATIONS.** In the future, more disease outcomes companies will be developed. Pharmacists will be needed to help develop and implement pharmacoeconomic studies and will also provide expertise in the analysis and interpretation of the pharmacoeconomic data.
- **STRATEGIC MARKETING CONSULTANTS.** The present growth in healthcare marketing agencies should continue. Pharmaceutical companies, health systems, and disease outcomes companies that contract with these agencies to develop marketing materials, educational programs, and economic models for therapeutic interventions will hire or contract with pharmacists to assist in these services.
- **HEALTHCARE SYSTEMS (PHYSICIAN-HOSPITAL ORGANIZATIONS).** The expectation that risk-sharing and capitation will continue indicates that large hospital systems, independent practice associations, and others will evaluate the need for adding healthcare professionals to their staffs or reassigning responsibilities. Pharmacists have demonstrated their utility in providing quality healthcare while reducing costs through drug formulary development and management.⁵
- **BENEFITS CONSULTANTS.** Currently more than 50% of all prescriptions are covered by third-party plans. The complexities of managed care pharmacy have created the opportunity for pharmacists to fill the role of intermediary for benefits consultants. This role requires an understanding of the PBM industry, plan design specifications, and eligibility issues.
- **LARGE EMPLOYERS.** In a role similar to a benefit consultant, major employers may directly hire pharmacists to assist in the development of their employee prescription plans. This involves reviewing the various PBM programs, participating in the request for proposal process, and interpreting the reports provided by the selected vendor.
- **HEALTH MAINTENANCE ORGANIZATIONS/HEALTH INSURANCE COMPANIES.** HMOs and health insurance companies usually hire a PBM to administer drug programs. Since the prescriptions are a large portion of their budget, they sometimes employ pharmacists to monitor this benefit. These pharmacists manage the per member per month

(PMPM) pharmacy costs, which vary by benefit design and copay structure.

Prescription Benefits Management Companies: PBM companies are contracted to administer prescription benefits for employer groups, HMOs, and government programs. The expertise of pharmacists will be required in the following areas.

- **SALES AND MARKETING.** Large employer groups, health maintenance organizations and government programs contract with PBMs to administer their pharmacy programs. Many large PBMs employ pharmacists to explain their program to these customers and assist in benefit design. These pharmacists sometimes work with actuaries and underwriters to help price the program.
- **OPERATIONAL FUNCTIONS—ELIGIBILITY AND BENEFIT DESIGN ISSUES.** Providing prescription benefits may require the participation of pharmacists in cross-functional groups that assess the issues related to implementing a large population. The pharmacist can act as a consultant to the systems areas where the benefit design is built into the claims adjudication process. One of the most challenging areas for the pharmacy profession is guiding the development of providing and budgeting cost-effective therapy for recipients of government programs, particularly Medicare/Medicaid.
- **CLINICAL POLICY DEVELOPMENT.** Many HMO and PBM companies have Pharmacy and Therapeutics committees to develop and maintain their formularies. Pharmacists on these committees perform drug reviews on new medications, assess new technologies, and help determine health plan policy on new therapies.
- **PHARMACOECONOMICS.** Formulary decisions will be based, in part, on various types of pharmacoeconomic analyses that will be done by interdisciplinary teams comprised of pharmacists, physicians, nurses, data analysts, and administrators.

Table 2. The Change of Pharmacist Roles under Managed Care

Current Roles	New Roles
Director, Hospital Pharmacy	Director, HMO Pharmacy
Hospital Clinical Coordinator	Disease Outcomes Specialist
Purchasing Director	Contracting—PBM/HMO
Drug Information	Clinical Policy—PBM
Corporate—Pharmacy Chain	Network Management—PBM

- **CONTRACTING.** The increase in formulary restrictions means that healthcare providers will be investigating advantageous contracting situations with pharmaceutical companies. Pharmacists working for HMOs and PBMs have been moving into co-marketing positions with pharmaceutical companies and their managed care divisions.
- **NETWORK MANAGEMENT.** Managed care pharmacy has occasioned the development of pharmacy networks, in which pharmacies contract with PBM companies and local HMOs to provide pharmaceuticals to their patients. In many organizations, a pharmacist is a member of the network management department.
- **CUSTOMER SERVICE.** The increasing sophistication of telecommunications has fostered the development of customer service centers. There is a need for drug information benefit design interpretation, and education of patients via telephone. Pharmacists are often used to train the actual customer service representatives in these organizations or as a consultant to interpret and clarify benefit design issues.
- **ACCOUNT MANAGEMENT.** Purchasers of a third-party prescription plan usually are provided with a contact person at the PBM. Pharmacists can assume the role of account manager.

Pharmaceutical Companies: In the past, pharmaceutical companies employed pharmacists in the areas of traditional research, creation of FDA drug information, and clinical documentation. This industry has begun to utilize pharmacists to review drugs under development for impact on the cost of treating an illness. These individuals will also be involved in the decision making processes of marketing and whether to continue the development of a new drug. The pharmacoeconomic review of drugs under development will determine if new entities will move through all phases of research in order to gain FDA approval on the basis of safety and efficacy.

Managed care has criticized the marketing of second- and third-generation pharmaceuticals that provide little advantage in treatment over first generation drugs. In addition, contracting, rebate analyses, and training of managed care staffs will need to require pharmacists familiar with the issues and concerns of managed care.⁸

Pharmacy Administration: The challenge of being both a pharmacist and an administrator is not new. With the rise of managed care, however, the process of administration has changed significantly. A pharmacy administrator for a large prescription benefits

firm or hospital system is faced with many of the following challenges:

- How to implement disease management and incorporate pharmacy/medical data
- How to evaluate and interpret outcomes and measure quality
- How to contract with pharmacies and pharmaceutical companies to reduce costs
- How to provide pharmaceutical coverage to Medicare/Medicaid patients without a dramatic increase in costs
- How a major systems change will affect the processing of systems
- Determining the adequacy of the outpatient pharmacy network
- Resolving how the PBM can support the total quality initiatives required by such oversight organizations as Joint Commission on Accreditation of Hospitals (JCAHO), National Committee on Quality Assurance (NCQA), and Hedis.

The Challenges for the Future

It is apparent that pharmacist must adapt to managed healthcare or continue to participate in the cost-ineffective filling of prescriptions. The advent of pharmacoeconomics, pharmacoepidemiology, cost analyses, and disease outcome management will provide the opportunity for a new generation of pharmacists. The pharmacy profession has a pivotal opportunity to drive many of the above initiatives due to the fact that intervention through medication has perhaps the most significant impact on cost-effective disease management.

For this adaptation to occur, change must begin with the education of future pharmacists. Currently, there are 79 operational and planned pharmacy schools in the United States, graduating approximately 7,500 pharmacists each year. With the current patterns of employment trending toward a surplus of pharmacists, these colleges of pharmacy must be creative in preparing students for new roles. The schools and universities also need to address the impact of specialization versus diversification in pharmacy careers. Greater diversification can be accomplished by offering simultaneous dual degrees and continuing education that leads to certification training in disease state management. The scope of pharmacist education in the 21st century must consider such areas as:

- computer assisted learning and communication
- managerial and administrative skills—conflict resolution, negotiating, prioritizing projects, planning a budget

- quality control and quality management
- presentation methods—writing newsletters, developing slide presentations
- thorough understanding of the health insurance industry
- familiarity with the incorporation of pharmacy services into government programs
- educational methods—lectures, seminars, computer simulation, case studies, etc., that encourage utilization of clinical skills and insight to provide patient or physician education
- “wellness” thinking and training
- patient outcome management and systems to document intervention

Conclusion

There is a growing concern in the pharmacy profession—fueled by the present environment of hospital and independent retail pharmacy closings, pharmacy chain mergers, the proliferation of mail order pharmacy and technicians’ greater role in the dispensing function—about the future identity and role of the pharmacist in healthcare delivery. In order for pharmacists to maintain their valued position as healthcare provider, it will be necessary to carve out a new role in the managed care setting. Pharmacists can leverage their current proximity to patients by giving them the knowledge and tools to use medications appropriately. In addition, pharmacists will need to prove that their therapeutic monitoring and

interventions make a significant difference in a healthcare environment focused intently on outcomes.

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