Director's Forum

Nontraditional Career Opportunities for Pharmacists

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The changing landscape of health care mirrors that of health-system pharmacy, with pharmacists' scope of practice and provider status being the most significant changes. This creates new roles and opportunities; many of these roles are considered to be nontraditional in today's practice. This article reviews some new roles for pharmacy leaders that provide different career options and pathways. Nontraditional career opportunities discussed include expanded consulting roles in pricing analytics and drug pricing programs (contracting, 340B programs), pharmacogenomics patient consult services and clinics, specialty drug pharmacies, and compounding pharmacy services. To continue to develop high-performing pharmacy departments, pharmacy directors should recognize these roles and ensure they are clearly defined and managed. With the advent of these nontraditional opportunities, pharmacy departments can further expand their ability to provide advanced patient-centered pharmacy services.

INTRODUCTION

Over the last 40 years, pharmacists have made significant strides in changing their public perception from “pill counter” or “basement dweller” to trusted patient advocate and health care team member. Pharmacists are now regular contributors to patient care in rounding with medical teams, leading medication adherence efforts, and pursuing federal legislation for various payment models. Health care's push to consolidate, reduce costs, and maintain quality, along with the need for patients to responsibly use medications, provides pharmacists more opportunities to transform their practice from order fulfillment to leaders in drug therapy management.¹ Pharmacists can be impactful frontline health care leaders by rising “above the traditional boundaries” and seeking nontraditional opportunities that improve patient care.¹ These new roles address the issues of rising drug prices, biosimilar medications, the opiate crisis, security of the supply chain, and changes in state pharmacy laws.

The majority of recent pharmacy school graduates begin their career in traditional roles according to a study by the American Association of Colleges of

Pharmacy (AACP). Community pharmacy continues to be the leading practice setting upon graduation, with health-system pharmacy and pharmacy residency programs as the second and third most popular practice settings for recent graduates.^{2,3} When comparing the 2016 responses to 2009, it is found that newer graduates are slowly starting to find career opportunities that may have been uncommon or nonexistent for earlier graduates. For example, the 2016 survey included response options unavailable on the 2009 survey such as clinic-based pharmacy, consultant, academia, and home care.^{2,3}

This trend of different career opportunities is also important to consider in regard to the recent 10-year job outlook update from the Bureau of Labor Statistics (BLS). The BLS projected the employment of pharmacists to grow by 14% from 2012 to 2022, a job growth of about twice the average 7% for all occupations.⁴ However, the BLS has recently updated the projected growth to be a much slower 3% from 2014 to 2024, predicting a slight decline in employment of pharmacists in traditional retail settings.⁴ With staffing shortages in community pharmacy positions no longer an issue, many pharmacists

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and students seeking roles in this area may choose nontraditional opportunities. In addition, the student loan burden will place further pressure on community pharmacy practitioners to seek employment.³

The American Society of Health-System Pharmacists (ASHP) has recognized the need to assist pharmacists in exploring different career paths through its Practice Advancement Initiative (PAI). The PAI provides ideas about future practice models as an option for many new graduates and those seeking career changes.⁵ When reviewing new pharmacy practice models, the belief or assumption that significant changes in the use of pharmacy resources (including employees) is needed to improve the health of patients was accepted as a fundamental point of consensus for PAI.⁶

As the growth of pharmacy in traditional settings slows, pharmacy leaders should examine opportunities for innovative pharmacy roles that can be filled by uniquely qualified pharmacists. The goal of this article is to provide pharmacy directors with various options for nontraditional roles and to describe their impact on patient care services. This article will discuss nontraditional career opportunities such as expanded consulting roles in pricing analytics and drug pricing programs (contracting, 340B programs), pharmacogenomics patient consult services and clinics, specialty drug pharmacies, and compounding pharmacy services. With the advent of these nontraditional opportunities, pharmacy departments can expand their ability to provide advanced patient-centered pharmacy services.

NONTRADITIONAL OPPORTUNITIES

The nontraditional roles discussed in this section represent a response to the changing landscape of health care and pharmacy practice. These roles are considered as direct patient care services, meaning that they directly impact the drug therapy of patients by assisting in various aspects of care such as drug selection, adherence, and managing side effects. Although there may not be a drug product involved in this activity (eg, a prescription), these roles lead to the efficiency and effectiveness of patient care. Both of these parameters – direct patient care and clinical efficiency – are a baseline tenet of these nontraditional roles.

Precision Medicine-Pharmacogenomic Pharmacist

The concept of precision medicine is being explored in various disease states, ranging from cancer to transplant. By avoiding the “one size fits all”

model of medical practice, optimal clinical results can be achieved in some circumstances while decreasing treatment costs and enhancing patient safety. President Obama acknowledged the potential of precision medicine in January 2015 when he launched the Precision Medicine Initiative (PMI) – an effort to empower “healthcare providers to tailor treatment and prevention strategies to individuals’ unique characteristics.”⁷ ASHP released a statement on the pharmacist’s role in clinical pharmacogenomics in 2015. ASHP believes “pharmacists have a responsibility to take a prominent role in the clinical application of pharmacogenomics. This emerging science should be spearheaded in many institutions by pharmacists to promote safe, effective, and cost-efficient medication practices.”⁸

Approximately 7% of US Food and Drug Administration (FDA)–approved medications have a genetic variant that may affect prescribing recommendations.⁹ In the United States, this represents 18% of all outpatient medications and a significant opportunity to improve efficacy and safety of patient care.⁹ Pharmacogenomics clinics could be established, with pharmacists spearheading efforts to develop informatics platforms that effectively identify candidates for genetic testing, design drug therapy regimens based on testing results, and communicate recommendations to the patient’s care team. Northshore University Health System in Evanston, Illinois, has established a clinic in their Center for Personalized Medicine in which patients can speak with genetic counselors, pharmacists specially trained in pharmacogenomics, and medical geneticists. They were recently awarded \$2.3 million from the National Institutes of Health (NIH) as part of a \$55 million set of awards under PMI.¹⁹ Northshore will enroll 9,000 patients in support of reaching the PMI goal of 1 million people to improve the ability to prevent and treat disease based on individual lifestyle, environment, and genetics.¹⁰

Pharmacists with Expertise on Specialty Medications

The prevalence of specialty pharmacies is increasing; these medications currently represent over 40% of the late-stage pharmaceutical development pipeline.¹¹ Specialty drugs are typically high-cost medications that require close monitoring and careful management of therapy as part of complex treatment plans for diseases such as hepatitis C, cancer, and multiple sclerosis.¹² In 2012, approximately \$87 billion was spent in specialty medicine alone,

with annual spending estimated to reach \$400 billion by 2020.¹² A University Health System Consortium study estimated \$200 million annual revenue from specialty prescriptions at academic medical centers.¹² Establishing specialty pharmacies and hiring pharmacists for those services not only represents a significant revenue potential but also increases medication access for patients and continuity of care that in turn improve medication adherence and patient safety.¹²

University of Utah Health Care (UUHC) began the development and implementation of a specialty pharmacy program in 2014.¹² By establishing a specialty pharmacy program with a centralized prior authorization process for specialty prescriptions, a 24/7 call center, and standardized pharmacy documents in the electronic medical record (EMR), UUHC experienced a 137% increase in specialty pharmacy revenue in the 2015 fiscal year compared to their 2013 fiscal year.¹² The considerable increase in revenue resulted from new prescription capture.¹² In 9 months, they enrolled approximately 700 new patients to the specialty pharmacy program.¹² The specialty drug referrals required the addition of a full-time pharmacist.¹² Pharmacists answered clinical or medication-related questions, performed as-needed or annual follow-ups, completed clinical assessment of patients, and provided medication education.¹² UUHC's efforts to establish a specialty pharmacy program resulted in increased revenue, systemwide services, and a fully accredited specialty pharmacy.¹² Future plans include establishing a high-capacity central filling pharmacy to increase dispensing capacity and improve efficiency.¹²

Drug Pricing Analytics

The 340B Drug Pricing Program was created in 1992 and expanded under the Affordable Care Act; this expansion raises questions about participation eligibility, program oversight, program savings, and compliance. The program also updated their rules and regulations in the form of a Mega Guidance release, schedule for distribution in November 2016. Creating 340B pharmacist positions or hiring 340B consultant pharmacists can benefit health systems by preventively addressing steps that can be taken prior to the release of the Mega Guidance, operationalizing changes following Mega Guidance release, and overseeing drug pricing programs.

Career opportunities dedicated to 340B operations and compliance may also address rulings under the Mega Guidance to include the following

circumstances. The Mega Guidance will disqualify discharge prescriptions written during inpatient hospitalizations.¹³ Also under proposed changes, a drug "bundle-billed" to Medicaid will be ineligible for 340B pricing.¹³ In particular, disproportionate share, children's, and free-standing cancer hospitals will need to consider the possible hurdles this change would create with 340B programs and the requirements of the Group Purchasing Organization (GPO) prohibition.¹³ Patients covered by Medicaid managed care plans and the 340B drugs intended for their use are currently included in 340B depending on state requirements, but they may be carved out of 340B.¹³ Pharmacists can begin working with covered entities to establish Health Resources and Services Administration (HRSA)-reviewed and -approved agreements with state and/or managed care plans.¹³ These are examples of the challenges that new opportunities in 340B programs offer to pharmacists.

Assessing and ensuring compliance with 340B creates an excellent opportunity for a nontraditional role as a drug pricing pharmacist – a role that focuses on the operations of managing the records and data around drug pricing in a 340B program or other contract programs for drug pricing. Examples for requirements in the 340B program include maintaining records that are accessible and auditable.¹⁴ Records will need to be audited frequently as a tighter timeline on compliance reporting may come into effect. Issues such as duplicate discounting or diversion of 340B medications to ineligible patients must be reported to manufacturers within 90 days of discovering them.¹³ Covered entities will also need to correct GPO prohibition errors within 30 days.¹³ Entities should compare their 340B prescribing records to contract pharmacy's 340B dispensing records at least quarterly as a compliance check.¹⁵ Covered entities can be subject to numerous penalties for violating 340B program requirements. Failure to comply with anti-diversion of duplicate discount provisions can result in forfeiture of discounts back to the manufacturer. When a diversion violation is knowingly or intentionally committed, entities may additionally be required to pay interest on the discounts refunded to the manufacturer. Entities can also be disqualified from further participating in 340B programs for a period of time determined by the HRSA.¹⁶ Drug pricing pharmacists have a valued role in preventing noncompliance through managing the data and records around pricing in a 340B program.

A drug pricing pharmacist can also conduct self-audits of the compliance to the 340B program. HRSA began conducting 340B program audits in 2012. Covered entities were audited on a random and a targeted basis (factors include length in program, number of outpatient facilities, number of contract pharmacies, complexity of program, and volume of purchase).¹⁷ Since 2012, HRSA has significantly increased its yearly auditing compared to previous years.¹⁸⁻²¹ Covered entities should self-audit and respond to changes in 340B program guidance to ensure that policies and procedures are compliant. Areas of noncompliance can be identified and rectified prior to an official audit to avoid penalties such as forfeiture of discounts back to the manufacturer.

Drug pricing pharmacists may also serve as advocates by sharing their health-systems concerns, acting as a liaison during official comment periods on proposed 340B rules and regulation. They may also work with elected officials and other advocacy groups, in collaboration with public relations, risk management, and government affairs staff, to ensure that proposed changes do not negatively impact patient care.

Compounding Pharmacists

United State Pharmacopeia (USP) <800> prioritizes safety of health care professionals and patients through the regulation of hazardous drug handling from delivery to patient use. With federal enforcement set to begin in July 2018, institutions are looking at the logistics of facility renovations. A program instituted at Froedtert Hospital is a prime case study outlining the potential behind implementing facility changes in line with USP <800> recommendations. Concerned about quality and safety with external compounding environments, inflated prices, desire to reduce waste, and ongoing drug shortages, Froedtert created a new integrated service center (ISC) that shares space with other hospital departments likewise seeking centralization.²² The new ISC is fully compliant with USP <800> and USP <797> and costs \$573,000 including equipment.²² The ISC has 1.5 full-time pharmacists employed for the operation hours of Monday to Friday from 7 a.m. to 3:30 p.m.²² Froedtert is expecting approximately half a million dollars in savings due to the identification of 8 products for in-house compounding during the startup phase.²²

When assessing renovation requirements for USP <800>, the potential gains from building or registering as a 503b facility should also be considered.

Several large health systems and integrated delivery networks are considering launching 503b compounding facilities driven by the new FDA draft guidelines.²³ These guidelines would require health systems and other facilities that make both patient-specific and batch sterile preparations in the same location to register as outsourcing facilities under CGMP rules.²³ Yale-New Haven is anticipating a 2018 launch date of their own 503b facility, which will also open up opportunities in home infusion.²³ Another hospital, Brigham and Women's Hospital (BWH), is also looking toward launching a 503b facility by utilizing a pharmaceutical company to develop and operate a 503b facility that would service all the hospitals within the Partners Health Care network.²³ Although complying with CGMP regulations could be challenging and costly, 503b outsourcing facilities require a licensed pharmacist to supervise compounding who could take on additional responsibilities. As a 503b facility, a health system can have the flexibility to compound more than the minimal number of anticipatory doses and provide sterile compounded products to smaller hospitals within their network, doctors' offices, ambulatory care clinics, emergency rooms, and so on. Pharmacists can serve as supervisors of the facility and as regulatory experts to ensure compliance and circumvent potential violations.

ROLE OF THE HEALTH-SYSTEM LEADER

Expanding nontraditional career opportunities will be essential to support the provision of evolving patient-centered pharmacy services outlined in this article. Pharmacy leaders must support these innovative roles to meet a growing care need and to maintain a staff that is professionally developed and satisfied. When designing a new pharmacy role, or altering a current role to include nontraditional job functions, several factors should be considered. First, any position changes should align with the current pharmacy practice model, including care delivery frameworks, regulatory compliance requirements, medication distribution and operations structures, cognitive service/clinical pharmacy demands, technician training and advancement, and technology optimization. Often, organizational priorities may dictate when nontraditional roles can be most effectively applied. For instance, an organization-wide focus on compliance and outsourcing may create an opportunity to introduce a compounding quality and compliance role to address a critical hospital need. Other factors for the

health-system pharmacy leader to consider when creating nontraditional roles include the following:²⁴

- Identification and management of data (including “Big Data”)
- Cultures of the department and the organization
- Strategic goals of the organization and department
- Political and decision-making structures of the organization
- Departmental operations and capacity.

Often, leaders need to leverage existing departmental resources when building nontraditional career opportunities. Current positions can be combined, divided, and altered to ensure alignment with management infrastructure, strategic care priorities, and fiscal goals. Once these nontraditional roles are filled, the pharmacy leader needs to ensure proper communication with staff as to the purpose of the new role. Further, the person who fills the new role will need ongoing mentorship, as the role becomes more established. During these mentor meetings, a plan for advancement and growth can also be developed. Finally, data and relevant metrics associated with the new position should be collected and disseminated to demonstrate effectiveness of the position. This information can be used to justify the personnel expense and to expand the use of nontraditional roles department-wide, given a positive return on investment. Overall, nontraditional roles, when supported and designed thoughtfully, can modernize pharmacy processes, ensure compliance with regulatory and quality standards, and ensure global departmental effectiveness.

CONCLUSION

Health-system pharmacy leaders will face exciting and challenging times as the current climate continues to put economic pressure on the delivery of contemporary health care. To advance the practice of pharmacy, health-system leaders must proactively identify trends and seek out unfilled opportunities that leverage a pharmacist's unique skill as the medication use expert. Health-system innovators have long been setting an example for the elevation of pharmacist services, and this constant evolution must continue for the profession to provide the highest quality care to patients. Guidance documents, case examples, and sample financial models for these services are often available through regulatory agencies, professional associations,

and published policies from health systems. With the advent of these nontraditional opportunities, pharmacy departments can expand their ability to provide advanced patient-centered pharmacy services.

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