Director's Forum

Issues Facing Pharmacy Leaders in 2014: Suggestions for Pharmacy Strategic Planning

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In 2013, the *Director's Forum* published our assessment of issues facing pharmacy leaders to assist pharmacy directors in planning for the year ahead. The issues include health care reform and the Affordable Care Act, the American Society of Health-System Pharmacists Pharmacy Practice Model Initiative, the health care workforce, patients' perceptions of pharmacists, and the changing landscape of pharmacy education. Based on our environmental scan, the issues addressed in 2013 are pertinent to a department's plan for 2014. The goal of this article is to provide practical approaches to each of these issues to help pharmacy directors focus their department's goals for 2014 to support the development of patient-centered pharmacy services. This column will address (1) strategies to reduce medication costs and generate new pharmacy revenue streams, (2) innovative approaches to improving medication safety and quality, (3) steps to advance the clinical practice model, and (4) ways to create mutually beneficial student experiences.

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The reduction of health care costs while improving quality will continue to be an important goal of health care reform during 2014. The Patient Protection and Affordable Care Act (ACA) legislates some important milestones that influence health care change and will continue the pressure on hospitals to control costs. Specifically, the ACA expands Medicaid coverage to patients with pre-existing conditions and requires the individual health insurance mandate.¹

These required changes impact health-system pharmacy, which must assume the administrative burden to reduce costs while maintaining and even improving the quality of health care. Pharmacy leaders will need to “do more with less” by optimizing pharmacy practice models to focus on efficient medication distribution and effective monitoring of medication prescribing to prevent errors and unnecessary costs. The Pharmacy Practice Model Initiative (PPMI) developed by the American Society of Health-System Pharmacists (ASHP) serves as a guide for these practice models; the PPMI goals are focused on expanding clinical pharmacist roles, expanding pharmacy technician operational roles, developing appropriate training and credentialing for pharmacy staff,

optimizing automation and technology, and taking ownership of the medication use process.²

In addition to the ACA, other factors will influence pharmacy departments in 2014. A variety of strategic planning techniques (eg, SWOT analyses, environmental scans, etc) can help the pharmacy director set realistic and practical goals. By identifying major issues driving changes in the health system, pharmacy leaders can proactively guide their departments to meet the challenges that lay ahead, thereby avoiding the pressure from external forces that strive to dictate the directions and plans of a pharmacy department. Pharmacy directors must also prioritize these issues in terms of the impact they may have on the department's progress and how they may influence resource allocations in a given year. Finally, by having a few directed yet simple strategic goals, pharmacy directors will facilitate the buy-in and understanding from pharmacy staff, physicians, and the C-suite.

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perceptions of pharmacists, and the changing landscape of pharmacy education. Based on our environmental scan, the issues addressed in the 2013 column are pertinent to a department's plan for 2014. The goal of this article is to provide practical approaches to each of these issues to help pharmacy directors focus their department's goals. This article will address (1) strategies to reduce medication costs, (2) innovative approaches to improving medication safety and quality, (3) steps to advance the clinical practice model, and (4) ways to create mutually beneficial student experiences.

REDUCING MEDICATION COSTS

US health care expenditures continue to rise, representing almost 18% of gross domestic product.⁴ In fact, the impetus for health care reform was this rising cost along with lagging quality of care compared to other industrialized countries. Health care reform shifted payer models from traditional fee-for-service (FFS) to value-based purchasing (VBP). Institutions are no longer reimbursed for workload volume, but rather for positive quality outcomes. To account for the shift to VBP, new care delivery models (eg, accountable care organizations [ACOs]) for Medicare patients coordinate care in an interdisciplinary manner and across various patient encounters (acute and ambulatory care). Throughout these new care models, medication use must be evaluated to ensure that the right drug is being prescribed at the right time and for the right reasons. As more patients are being cared for through these new models, the control of medication costs is essential to a health care system's fiscal stability.

To control costs, sweeping solutions such as workforce reductions have already been undertaken at several hospitals across the country.⁵⁻⁷ Pharmacy departments are not immune to these layoffs and will need to take a proactive approach to reducing overall department expenditures to maintain patient-centered pharmacy services.

Cost Control Approaches

The Ohio State University Wexner Medical Center (OSUWMC) chose to focus on reducing medication expenses as a strategy to address health care cost containment. The OSUWMC pharmacy department set a goal to reduce the drug budget by \$8 million over 18 months. This goal required a plan and a performance metric to ensure that the department was meeting its goal. The OSUWMC pharmacy department's drug budget represents almost 80% of the

department's overall costs and nearly 7% of the total hospital expenses. An important strategic objective for the OSUWMC pharmacy department in 2014 is to control medication expenses. A strategic objective focused on addressing drug expenses should be included in any department's plan for 2014.

There are several ways to address drug costs, and OSUWMC chose a multipronged approach focusing on the following areas: (1) gain efficiencies and savings in purchasing and contracting of drugs, (2) use focused inventory management, (3) reduce waste and repackaging where appropriate, (4) address inappropriate patterns of medication utilization, and (5) enhance pharmacy and therapeutics (P&T) committee processes for formulary management.

To increase efficiency in drug purchasing and contracting, we re-evaluated drug contract prices for all drugs to ensure that we were getting the best price possible. An ongoing, automatic system for implementing price changes in the pharmacy's computer system ensured that pharmacy revenue would accurately reflect the changes in contract prices. High-cost medications such as blood factor products and cytomegalovirus immune globulin were shifted to an electronic consignment inventory system, where the medications are billed as they are removed from a monitored storage refrigerator. We also reviewed inventory levels and evaluated minimum and maximum levels for appropriateness and current utilization. Intravenous admixture waste was reduced by switching to compounding medications instead of purchasing expensive premixed medications. We investigated the stability of our compounded products and revised our stability standards to extend the expiration dating. As an example, we extended the stability of clindamycin from 30 days to 90 days; this extension resulted in reduced waste of this expensive medication. The P&T committee evaluated the use of insulin pens; now the daily doses of insulin glargine and insulin detemir are compounded, as opposed to dispensing pens for each patient.

The P&T committee strengthened the OSUWMC medication utilization program by gaining medical staff support of existing medication use evaluation (MUE) criteria for high-cost medications such as filgrastim. The policy that allowed pharmacists to automatically convert patients from intravenous to oral (IV to PO) was reinforced by the P&T committee, thereby significantly improving compliance to that program. Other examples of changes in medication utilization that had significant cost impact was the switch of the deep vein thrombosis (DVT) prophylaxis agent from

enoxaparin to heparin and the substitution of pantoprazole for esomeprazole as our preferred proton pump inhibitor. In terms of enhanced formulary management, a new category of “formulary nonstock” was established, allowing high-cost, low-use items on formulary without incurring the cost of physically stocking the item in inventory. This new process was feasible, because the P&T committee approved the purchase of formulary nonstock items within 48 hours of order in nonemergency situations.

The OSUWMC pharmacy department needed a metric to track their progress in reducing medication expenses, because medication use and the associated costs is not a “static” system. For example, patients who are seriously ill need more medications and often more costly medications. As the acuity of patient care changes, costs will also change. This requires a metric that normalizes costs so that 2 points in time can be easily compared to determine progress toward a goal. The pharmacy department chose to measure the costs of medications dispensed divided by the Case Mix Index (CMI) adjusted patient day. This metric is easily measured by gathering data that are readily available (medication dispenses from the computer system and their resulting costs, CMI, patient days), and it requires little or no manipulation to calculate. In addition, the metric must be credible to withstand the rigor of any outside third party. As a result of OSUWMC’s efforts in medication cost reduction, the metric fell by almost 23% from baseline or an equivalent of around \$9.3M.

Creating New Revenue

At OSUWMC, several areas of new revenue were identified as part of managing costs. One of these is telepharmacy. Telepharmacy programs involve providing remote pharmacist order management to smaller hospitals that do not have 24-hour pharmacy services; this improves order processing speed, expands clinical pharmacy services, and avoids medication cost.⁸ The OSUWMC pharmacy is establishing contract services with smaller institutions in a pilot project to determine the feasibility of this program as an ongoing revenue stream for the pharmacy.

Specialty pharmacy is another area of opportunity for health-system pharmacy. Specialty medications are high-cost pharmaceuticals that are only available through a limited distribution channel. The specialty medications are often filled in an outpatient pharmacy that is separate from the hospital or health system. With increased focus on cost containment and continuity of care, hospital and health-system

pharmacies are developing their own specialty pharmacy or are establishing partnerships with existing specialty pharmacies to reduce the cost of these medications and improve patient access. Specialty pharmacies allow health systems to capture revenue for these expensive drugs with excellent profit margins, reduce medication costs, and improve patient medication compliance.^{9,10}

The OSUWMC department of pharmacy is evaluating partnerships with specialty pharmacies as a strategy to generate revenue for the health system. An understanding of the role of specialty pharmacy and its benefits should be a key objective for pharmacy leaders in any strategic plan for 2014.

IMPROVING MEDICATION SAFETY AND QUALITY

Health care reform places a high priority on improving overall health care quality and safety. Health systems are mandated to reduce 30-day readmissions of patients with heart failure and prevent hospital-acquired infections such as ventilator-associated pneumonia and catheter line-associated bloodstream infections. A mission of pharmacy departments is to reduce patient harm from medication errors by adhering to accepted medication safety practices. The meningitis outbreak from improper compounding by the New England Compounding Center, however, highlights the consequences of not following the safety measures set by the United States Pharmacopeia (USP) Chapter <797>.¹¹

OSUWMC has taken an active approach to reducing medication harm events and improving medication safety and quality. When the medical center went live in October 2011 with an integrated electronic medical record, barcode medication administration (BCMA) was established throughout the health system, including the emergency department.¹² BCMA significantly reduced medication administration errors, especially wrong dose errors. Another technology-based medication safety initiative at OSUWMC was the implementation of smart infusion pump technology in March 2012. These pumps contain drug libraries that screen for the appropriate administration of intravenous medications. Smart pumps intuitively improve safety, but poor compliance to drug libraries reduces their safety benefit.¹³ To prevent user issues with smart pumps, the OSUWMC pharmacy department participates in continuous quality improvement initiatives with nursing that has improved compliance significantly. In addition, consistent drug library updates maintain current practices in the safe administration of intravenous drugs.

Several other department initiatives have been established to improve patient safety. A department dashboard has been created that incorporates important safety and quality data for staff tracking. The hospital has also developed a review process for medication errors that provides information to the point-of-care staff. For example, a medication safety pharmacist examines the most recent errors reported on a nursing unit and reviews the causes of and methods to prevent specific errors. This real-time learning by the staff has heightened their awareness of medication errors and illustrates ways these errors can be prevented at the point of care.

National programs in patient safety provide opportunities for directors of pharmacy to become involved and learn about medication safety from a broad network of pharmacists. ASHP has established the Medication Safety Collaborative, an annual meeting designed to provide educational information for improving quality and patient care. The Institute for Safe Medication Practices (ISMP) and the US Food and Drug Administration (FDA) also serve as resources for medication safety. A working knowledge of the FDA's role in medication safety will be important for planning in 2014, as the November 2013 passage of the Drug Quality and Security Act (DQSA) provides the FDA with greater oversight of drug compounding.¹⁴

ADVANCING THE PHARMACY PRACTICE MODEL

ASHP's PPMI will continue to shape health-system pharmacy and drive innovations in pharmacy practice. An important goal of the initiative is to expand pharmacy services through various initiatives such as expanding pharmacist roles across the continuum of care, optimizing the use of technology, and expanding technician responsibilities. These initiatives will require approaches that are in line with overall hospital goals and may also entail changes to current state and national legislation.

Expanding Pharmacist Responsibilities

To increase efficiency in patient care, OSUWMC implemented clinical privileges to acute care and ambulatory pharmacists. The ambulatory pharmacists are privileged to perform clinical services in the anticoagulation, lipid, and anti-arrhythmic clinics. OSUWMC acute care pharmacists are privileged in a variety of areas, including pharmacokinetic monitoring, medication reconciliation, antibiotic stewardship, parenteral nutrition monitoring, and anticoagulation management. As members of the medical staff, these

pharmacists can provide direct patient care services to cardiology patients during clinic visits. (A previous *Director's Forum* article described privileging and credentialing, listed steps in pharmacist privileging, and discussed the benefits of privileging.¹⁵)

Advocating for Expanded Pharmacist Roles

Pharmacists are currently not recognized as health care providers in the Social Security Act. This prevents pharmacists from billing for ambulatory clinic visits. On October 1, 2013, legislation was passed in California to grant pharmacists provider status within the state. This legislation, which went into effect January 1, 2014, declares pharmacists as health care providers with the authority to provide patient care services. It also establishes the advanced practice pharmacist (APP) recognition, which allows pharmacists to perform some physical assessments, order tests, and initiate, adjust, and discontinue drug therapy.¹⁶ Pharmacists can bill for services and receive compensation through California's Medicaid program and private insurance companies. Due to these expanding responsibilities, pharmacists will need additional credentials such as board certification and residency training. The legislation is a tremendous step forward for the profession and represents a significant victory for advocacy efforts by pharmacists in California.

In December 2012, the Joint Commission of Pharmacy Practitioners (JCPP), a coalition of 14 organizations that includes ASHP and the American Pharmacists Association (APhA), agreed to collaborate on achieving provider status for pharmacists on a national level. Currently, initiatives include publishing articles that illustrate the value of pharmacists to key stakeholders, collecting evidence of the financial benefits of pharmacist services, highlighting state-level efforts, communicating with key members of Congress, and meeting with regulators who are responsible for ACA implementation. Barriers to these initiatives include the focus of Congress on cost savings initiatives and potential resistance from health care providers who already have provider status.¹⁷

Advocacy for the recognition of pharmacists as clinical providers is important to raise awareness and ultimately change legislation. Participation in professional organizations such as ASHP and the APhA keeps pharmacists informed about the current state of the profession. Pharmacists can make financial contributions through these organizations' political action committees. Contact with local, state, and national legislatures can also help build relationships that will

enable these organizations to understand the significance of pharmacy services in patient care. Finally, pharmacists can comment on regulations submitted by the FDA or Centers for Medicare and Medicaid Services that could impact pharmacy practice.¹⁸

With the decrease in the number of available jobs and the increase in available job candidates, pharmacy directors can be more selective in identifying exceptional candidates to take on advanced clinical roles that are essential to health-system pharmacy.¹⁹ These pharmacists must have the appropriate credentials and maintain appropriate continuing education to remain current within their practice area. Advancing the practice model should be a key strategy for pharmacy directors in 2014. They should develop programs that allow pharmacists to practice at the “top of their license” and involve their organizations in advocacy for expanded pharmacy roles and provider status.

EXPANDING PHARMACY STUDENT ROLES

As pharmacy schools continue to grow, the need for quality introductory and advanced pharmacy practice experiences (IPPE and APPE) increases as well. This is an opportunity for health-system pharmacy leaders to incorporate student pharmacists in the pharmacy department's practice model. Through their participation, student pharmacists can gain valuable experience and awareness of issues facing health-system pharmacy and how they can contribute to solutions as future practitioners.

The OSUWMC department of pharmacy experiential training program provides rotations for student pharmacists in their second, third, and fourth years of training. During their second year, pharmacy residents serve as primary preceptors for 2 students and coordinate learning opportunities over the course of a focused week. These residents are assigned clinical rotations during this time, which gives them insight into the life of a clinical pharmacist. Additionally, student pharmacists learn from pharmacist preceptors through resident and preceptor interactions for topic discussions and patient profile review. The residents offer coordinated informational sessions throughout the week on topics such as smart pumps, emergency response, and sterile compounding. This layered learning model allows residents to gain teaching experience and for students to learn from recent pharmacy school graduates who provide mentorship.

During the third year of their experiential programming, student pharmacists participate in Intermediate Pharmacy Practice Experiences. They gain

experiential hours in community, ambulatory, and inpatient pharmacy practice. Students are able to build on their previous 2 years of introductory experiences and begin the transition to APPE. During this month, student pharmacists can shadow providers in various settings and perform functions such as immunization and medication therapy management. Student pharmacists also gain exposure in medication safety and literature review, with pharmacy residents serving as journal club session facilitators. This third year is flexible and allows student pharmacists to apply their knowledge from previous experiences and to learn about potential rotational opportunities that will be available during their fourth year of training.

OSUWMC offers a fourth-year pharmacy student experience in a block scheduling whereby students are on rotation for 3 to 4 contiguous months within the institution. This allows them to build their knowledge from one month to the next with increasing clinical responsibilities. During their first month, students are exposed to foundation operational and clinical experiences. They build on this experience in successive rotations, culminating with the provision of direct patient care on rounding rotations under the mentorship of residents or preceptors. Student pharmacists also take on active roles by providing medication histories, assisting with medication reconciliation, and performing medication profile review with preceptor supervision. These students are able to counsel patients on any new medications, including high-risk anticoagulation therapy.

A particular area of opportunity for health systems is improved efficiencies during transitions of care. One study showed that 54% of prescriber medication errors originated from medication orders during hospital admission. In terms of the transitioning out of the hospital, the discharge summary is only available to the primary care provider 12% to 34% of the time for the first follow-up office visit.²⁰ Student pharmacists can improve transitions of care by conducting medication histories and assisting pharmacists with medication reconciliation during hospital admission and upon hospital discharge. Through this experience, student pharmacists will understand the significance of their roles and are more likely to contribute to solutions when they are practitioners. APPE learning experiences serve as an excellent opportunity for student pharmacists to contribute to this endeavor. The development or expansion of a pharmacy student-training program in cooperation with a college or school of pharmacy is an important strategic objective for 2014.

CONCLUSION

Pharmacy department leaders must plan for and prioritize the issues facing the profession in the coming year. Several strategies were discussed in this article that align with the ASHP PPMI and Pharmacy Forecast 2014-2018.²¹ These strategies are summarized in **Table 1**. Strategic plans that address key issues in 2014 should include the development of programs to reduce drug expenses and to generate revenues. To improve medication safety and quality, pharmacy leaders should optimize technology, track progress using dashboards, and use national organizations as a resource. Clinical practice model growth in 2014

will be aided by advocacy for pharmacy provider status, expansion into ambulatory roles, and privileging and credentialing of pharmacists. Finally, incorporation of student pharmacists within practice models, especially transitions of care, will serve a dual purpose of educating future practitioners and providing value to health systems. **Table 2** provides a sample of a strategic plan with key goals that address the objectives of a department for 2014. If pharmacy directors use this plan as a template, they will be addressing the key issues for 2014 and moving closer to meeting the goal of developing patient-centered pharmacy services.

Table 1. Strategies to address issues facing pharmacy leaders

Issue	Strategy	Benefit/Outcome
Medication costs	Efficient purchasing and contracting of drugs	Reduction in overall drug expenditure
	Inventory management	
	Reducing waste and repackaging where appropriate	
	Medication use evaluation criteria	
	P&T committee formulary management	
Revenue generation	Telepharmacy	Improved order processing speed, expanded clinical pharmacy services, avoidance of medication cost
	Specialty pharmacy	Revenue capture, reduced medication costs, improved patient compliance
Reducing harmful medication errors	Technology: integrated EMR, BCMA, smart pumps	Reduced medication administration errors
	Department dashboard	Staff awareness of safety measures over time
	Medication error review process	Staff awareness of medication errors and ways to prevent errors at point of care
	Exposure to national programs established by ASHP, ISMP, FDA	Knowledge about medication safety from a broad network
Pharmacy practice model advancement	Clinical privileging and credentialing of acute and ambulatory care pharmacists	Expanded pharmacist clinical responsibilities
	Advocacy efforts on local, state, and national level	Pharmacist provider status, billing for services
	Recruit qualified pharmacists	Expanded pharmacist clinical responsibilities
Student experiential education	Involve pharmacy residents in precepting student rotations	Mentorship for students, precepting experience for residents
	Involve students in medication history and reconciliation	Improve transitions of care, provide additional learning opportunities for students

Note: ASHP = American System of Health-System Pharmacists; BCMA = barcode medication administration; EMR = electronic medical record; FDA = US Food and Drug Administration; ISMP = Institute for Safe Medication Practices; P&T = pharmacy and therapeutics.

Table 2. Sample strategic plan for a pharmacy department in 2014

Strategic goal	Initiatives
EMR innovation: refine system to meet and exceed the medication needs of patients	<ol style="list-style-type: none"> 1. Implement charge on administration for medications where appropriate. 2. Implement patient scoring system as a useful tool for facilitating pharmaceutical care. 3. Configure EMR to accommodate new roles (clinical privileges). 4. Develop and implement process for managing EMR optimization requests.
Practice model advancement: serve as a benchmark for pharmacy practice models	<ol style="list-style-type: none"> 1. Meeting all cost-reduction goals. 2. Approve clinical privileges for at least 75% of identified staff. 3. Analyze and reorganize model to meet needs of medical center expansion. 4. Establish specialty pharmacy partnership. 5. Implement telepharmacy pilot. 6. Establish shared faculty positions with college of pharmacy.
Medication safety: reduce harmful medication errors	<ol style="list-style-type: none"> 1. Reduce the number of harmful medication errors by 10% of FY 2013 baseline. 2. Expand "grassroots" medication error review process to at least 75% to 80% of hospital areas. 3. Finalize and promote department-wide scorecard for pharmacy services.
Staff recognition: retain qualified pharmacists, technicians, and administrators	<ol style="list-style-type: none"> 1. Implement at least 1 to 3 initiatives in response to staff satisfaction survey. 2. Develop a committee to recommend staff for local, state, and national pharmacy awards. 3. Conduct at least 1 to 2 formal employee recognition ceremonies.
Scholarship: contribute to the overall body of pharmacy knowledge	<ol style="list-style-type: none"> 1. Increase submitted peer-review publications and book chapters by 5% from FY 2013 levels. 2. At least 50% of the resident manuscripts submitted for publication are accepted.

Note: EMR = electronic medical record; FY = fiscal year.

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