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Experts Foresee a Major Shift From Inpatient to Ambulatory Care

Bruce E. Beans

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Pharmacy Forecast 2016–2020, published by the American Society of Health-System Pharmacists Research and Education Foundation, predicts that health care payment reform will result in a significant shift of health-system resources from inpatient to ambulatory care.

The forecast's editor, William A. Zellmer, BS Pharm, MPH, President of Pharmacy Foresight Consulting in Bethesda, Maryland, outlined other significant predicted trends:[1]

- Health systems will:
  - Devote renewed attention to such public health initiatives as disease prevention and health promotion.
  - Be much more inclined to outsource or otherwise partner to provide certain activities.
- Health-system executives will:
  - Expect more leadership from pharmacists on an array of medication-use issues that impact institutional success.
  - More aggressively challenge medication pricing that harms patients.
  - More readily act upon their disagreements with the regulation, pricing, and distribution of specialty medicines.
- Therapeutic breakthroughs will cause major shifts in how health systems treat patients with certain diseases.
- Pharmacists and other health professionals will place greater emphasis on issues relating to professional autonomy and ethics.

The forecast is the fourth annual report the foundation has produced for

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hospital and health-system pharmacists. Other highlighted topics include:[1]

- The need to optimize the deployment of pharmacy talent.
- An emerging oversupply in some regions of pharmacists for entry-level positions.
- New tools to measure and improve pharmacist and departmental performance.
- Continuing attention to “meaningful-use” requirements for information technology.
- Implications of the patient empowerment movement for pharmacies.

The forecast was compiled based on the Web-based survey responses of a panel of more than 130 pharmacists who were nominated by the leaders of the five American Society of Health-System Pharmacists sections. It covers eight topics, discussed below. Responses to selected questions appear in Table 1, while Table 2 summarizes key recommendations from the report.

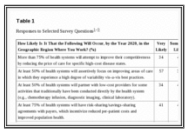

Table 1

Responses to Selected Survey Questions[1–9]

How Likely Is It That the Following Will Occur, by the Year 2020, in the Geographic Region Where You Work? (%)	Very Likely	Some LL
More than 75% of health systems will attempt to improve their competitiveness by reducing the price of care for specific high-cost disease states.	54	-
At least 50% of health systems will assertively focus on improving areas of care in which they experience a high degree of variability vis-a-vis best practices.	57	-
At least 50% of health systems will partner with low-cost providers for some activities that traditionally have been conducted directly by the health system (e.g., chemotherapy infusion, diagnostic imaging, clinical laboratory).	54	-
At least 75% of health systems will have risk-sharing/savings-sharing agreements with payers, which incentivize reduced per patient costs and improved population health.	41	-

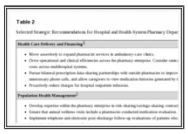

Table 2

Selected Strategic Recommendations for Hospital and Health-System Pharmacy Departments

Health Care Delivery and Financing[2]
• Move assertively to expand pharmacist services in ambulatory care clinics. • Drive operational and clinical efficiencies across the pharmacy enterprise. Consider centralizing services across multihospital systems. • Pursue bilateral prescription sum-sharing partnerships with outside pharmacies to improve medication-use quality and safety and appropriate medication-use • Proactively reduce charges for Hospital outpatient infusions.
Population Health Management[3]
• Develop expertise within the pharmacy enterprise in risk-sharing/savings-sharing contracts • Ensure that annual wellness visits include a pharmacist-conducted medication evaluation. • Implement telephone and electronic post-discharge follow-up evaluations of patients who

Table 1
Responses to Selected Survey Questions[1–9]

Table 2
Selected Strategic Recommendations for Hospital and Health-System Pharmacy Departments

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Health Care Delivery and Financing

According to the forecast, the intense, ongoing pressure to improve quality while reducing costs is leading many health care organizations to create economies of scale through mergers and acquisitions or to partner with outside entities such as chain pharmacies. Health-system pharmacies can help their organizations by “standardizing processes, implementing best practices that improve patient health, managing the formulary prudently, and applying business acumen throughout the medication-use process,” writes Scott J. Knoer, PharmD, FASHP, the Chief Pharmacy Officer of the Cleveland Clinic in Cleveland, Ohio.[2]

Eighty-five percent of panelists predict that executives in at least 75% of health systems will regularly consult with their pharmacy leaders to reduce medication therapy costs. Other health-system forecasts include:[2]

- Nearly all health systems will have strong financial incentives to keep their patients healthy without the need for high-cost health

services, such as inpatient care.

- An overwhelming majority will try to reduce the price of care for high-cost diseases, including for outpatient infusion.
- At least half will focus on improving care in areas in which they have a high degree of variability from best practices.
- At least half will partner with low-cost providers, such as chain drugstores, for some traditional health-system activities.
- At least half that utilize the 340B program will suffer declines in savings of at least 25% due to more restrictive patient and prescription rules.

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Population Health Management

In response to pressures on health systems to lower the cost of care, the overwhelming majority of pharmacy panelists foresee a growing emphasis on population health management. This involves explicit efforts to improve the health status and, thus, reduce the cost of care for the entire population that health systems serve, not just the sick or injured. Most panelists predict that at least three-quarters of health systems will have risk-sharing/savings-sharing agreements with payers by 2020.[3]

Other survey predictions include:[3]

- At least three-quarters of health systems will have formal programs that rigorously coordinate post–acute-care services.
- At least half of health systems will:
  - Encourage their patient populations to undergo annual wellness assessments.
  - Utilize electronic communication tools, such as electronic health record (EHR) patient-portal email alerts and smartphone texts, in home-based patient care programs to enhance patient education, provide health-related reminders, and encourage compliance and wellness-related behavioral changes.
  - Include pharmacists in community-wide programs that focus on improving the health of their population.
- At least a quarter of health systems are somewhat likely to integrate behavioral/mental health services with primary care.[3]

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Drug Development and Therapeutics

Novel new drug approval has increased every year since 2011, with the Food and Drug Administration approving a record number of new drugs in 2014. Twenty-two percent of these 41 new agents were considered breakthrough therapies that may substantially improve at least one clinically significant endpoint. These include pharmaceuticals for chronic diseases such as hyperlipidemia, rare diseases, and cancer.[4]

Given the economic concerns expressed by both providers and payers

regarding the significant number of new oncology drugs, 97% of panelists believe it is at least somewhat likely that at least half of cancer therapies will be driven by treatment pathways designed to improve care based on efficacy, toxicity, and cost factors.[4]

"Translating pathways into electronic medical record order sets may be challenging, especially if requirements differ among payers," write chapter authors Pamela K. Phelps, PharmD, FASHP, Director of Clinical Pharmacy Services at Fairview Health Services in Minneapolis, Minnesota, and James M. Hoffman, PharmD, BCPS, FASHP, Chief Patient Safety Officer at St. Jude Children's Research Hospital in Memphis, Tennessee.[4]

"Some health systems," they add, "have implemented a pharmacist-managed service to improve adherence, monitor patient response, and provide symptom management" for new oral anticancer agents. Yet only a quarter of panelists think it is very likely that at least half of health systems will have implemented such services by 2020.[4]

Other survey forecasts include: [4]

- At least 90% of health systems will review at least one biosimilar product for formulary addition.
- Oral anti-factor Xa inhibitors will replace at least 25% of current warfarin use in the long-term management of thromboembolism and clotting disorders.
- New biologic and specialty products will replace at least 25% of chronic care medications for common disorders, such as hyperlipidemia and diabetes.
- At least half of health-system pharmacists will make treatment recommendations based on pharmacogenomics information at the point of care.
- Use of specialty medications to treat non-malignant autoimmune and rare disorders will increase by 50%.
- At least three-quarters of health systems will increase their use of antiviral therapy for treating hepatitis C by at least 25%.

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Pharmaceutical Marketplace

All of the panelists agree that health-system expenditures for all medications likely will increase at least 5% in each of the next five years.[5]

"Within the past year, pharmaceutical manufacturers have positioned themselves to control the supply of raw materials, the distribution of high-cost medications, and the price of generics," write Heather A. Helsel, PharmD, Pharmacy Administration Resident at UW Health in Madison, Wisconsin, and Lee C. Vermeulen, BS Pharm, MS, FCCP, FFIP, Director of the UW Health Center for Clinical Knowledge Management. "Therefore, it is imperative for health systems to recognize, plan for, and appropriately react to changes in the pharmaceutical marketplace … in order to continually provide the best

patient care."[5]

Among the factors cited: most panelists believe that single-source generic drugs resulting from the consolidation of generic-drug manufacturers will increase health-system costs for generics by at least 25%. Also, the expansion of restricted distribution systems for high-cost therapies will result in specialty distributors becoming the sole source of at least half of high-cost medications. Other survey forecasts include:[5]

- Indication-specific pricing for new chemotherapy products will begin to occur, with variable pricing based on clinical-trial success rates.
- When newly admitted patients are using specialty medications, 90% of hospitals will use their patients' own supplies or, if clinically appropriate, defer administering the drugs.
- At least half of health systems will add resources to meet Drug Supply Chain Security Act requirements.
- In most health systems, shortages of essential medications will negatively affect patient outcomes.

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Data and Technology

With a goal of establishing the regional integration of EHRs, by 2020 it is at least somewhat likely that at least half of health systems will have implemented interoperable EHR systems that integrate health care data from out-of-network providers and across various care settings. Panelists also predict that patients in at least half of the health systems will be able to manage and access their health information and share it with all of their health care providers.[6]

As Kevin Marvin, BS Pharm, MS, FASHP, FHIMSS, an informatics pharmacist consultant in Swanton, Vermont, writes, such developments will help health systems comply with the Centers for Medicare and Medicaid Services Stage 3 EHR criteria, which must be met by 2018.[6]

Other survey forecasts include:[6]

- At least 50% of health systems will:
  - Generate specific, predefined quality metrics in real time for quality reporting and refining patient-care protocols.
  - Use a dashboard to report pharmacy department performance on standardized quality indicators in comparison with other pharmacy departments' performance in comparable health systems.
- At least 25% of hospitals will have linked EHRs to health care equipment to effect real-time changes in infusion pump medications and ventilator settings.
- At least 25% of health systems will use a dashboard to report each clinician's performance on specific quality indicators compared with the aggregate performance of comparable

clinicians within their health system. This could help develop provider-performance dashboards regarding medication-related issues.

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Pharmacy Workforce

Optimizing pharmacy workforces over the next five years will involve placing greater emphasis on ambulatory care. Three-fourths of the forecast panelists believe that at least a quarter of health systems will require patient-care pharmacists to be responsible for both inpatients and outpatients. Also, at least a quarter of health systems are expected to shift 10% or more of their inpatient pharmacy positions to ambulatory-care positions. This shift towards ambulatory care is expected to result in a vacancy rate of at least 10% for ambulatory-care pharmacy leadership positions.[7]

"Pharmacy staff development programs should ensure that there are adequate opportunities for education and training in management of ambulatory care pharmacy practice, transitions of care, and medication management of chronic illnesses," writes Cynthia Williams, BS Pharm, Vice President and Chief Pharmacy Officer of the Riverside Health System in Newport News, Virginia. Other survey forecasts include:[7]

- At least half of health systems will adopt a team-based approach to managing medication use, with formalized, varying levels of responsibility for technicians, students, residents, and attending pharmacists.
- At least a quarter of health systems will develop plans involving pharmacists, nurse practitioners, and physician assistants that support primary care physicians in caring for more patients.
- Health system salaries will decline by up to 10% for entry-level general-practice pharmacists but will increase by at least 25% for newly hired entry-level pharmacy technicians.

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Patient Empowerment

Federal health policies urge empowering patients to become more actively involved in their health care decisions in order to improve health outcomes and provide cost-effective care. In order to do that, notes the forecast's assistant editor, Edward Li, PharmD, MPH, BCOP, patients need to have self-efficacy, perceived personal control, and a level of health literacy.[8]

"At the provider and health care system level, there are programs that can be implemented to improve the patient's attainment of knowledge, self-efficacy, and health literacy, and ultimately increase patient empowerment behavior," writes Dr. Li, Associate Professor in the Department of Pharmacy Practice at the University of New England College of Pharmacy in Portland, Maine. "Such programs are transforming health care towards a more patient-centric model with clear

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implications for pharmacy professionals."

Most panelists predict that at least 50% of health systems will utilize such technologies as tablets, mobile applications, and Web-based applications to collect patient-reported outcomes and data regarding medication adherence. They also believe at least half of health systems will offer patients decision-making support, such as mobile applications and/or health coaches, to increase their knowledge of treatment options and help them communicate their preferences to their patient care team.[8]

They also predict that at least half of health systems will have patient representatives on clinical-policy committees, and at least a quarter will have patients or patient advocates co-lead patient safety and quality improvement committees.[8]

Other survey forecasts include:[8]

- Health systems will see a 50% increase in patient-assistance programs to lower patients' out-of-pocket drug costs.
- High out-of-pocket costs for newly prescribed high-cost medications will lead a quarter of health-system outpatients to forego such medications.
- Palliative care consultations for patients with advanced illnesses will increase by at least 50%.
- It is at least somewhat likely that at least half of health systems will integrate patients' preferences into treatment decisions.

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Ethics

"Health professionals are facing increasing ethical challenges, stemming partly from consideration of payers and provider organizations, growing weight of the business imperative in health care, tension between population health and individual health care, and the rapacious pricing of some medicines," writes Zellmer, the forecast report editor. "This topic is of special interest to pharmacists because they will more readily gain support for an expanded patient care role if they are perceived as being on the side of the patient rather than in the pocket of the business interests in health care."[9]

Noting that forecast panelists foresee a substantial increase in the number of ethical dilemmas referred to health-system ethics committees over the next five years, Zellmer contends such committees' deliberations will be enhanced if they include a pharmacy perspective.[9]

Another prediction: in the case of high-cost therapies, at least half of health systems will take into account a patient's psychosocial ability to adhere to the treatment before administering it. Panelists also believe that at least a quarter of health systems will initiate formal programs to reduce the use of heroic measures in end-of-life care.[9]

Other survey forecasts include:[9]

- National medical, nursing, and pharmacy professional societies

will collaborate to preserve professional autonomy to ensure the best interests of patients are served.

- At least half of health systems will implement a well-defined process for applying ethical principles in allocating scarce resources, such as medications in short supply.
- Clinicians in almost all health systems will be required to follow specific treatment pathways—which could vary according to the various payers requiring them—when treating patients with high-cost therapies.

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