ASHP Pharmacy Forecast Workshop: Trends That Will Shape Your Future

Anthony Scott, PharmD
Charlene Hope, PharmD, MS, BCPS, CPPS
Xavier Torres, PharmD, MHA

Developed by the ASHP Section of Pharmacy Practice Managers

Images through software subscription unless otherwise stated

Disclosure

- No presenters have any disclosures or conflicts of interest to declare in relation to this activity.

Agenda

1. Review trends in healthcare landscape
2. Review the Pharmacy Forecast report
3. Complete case study activities

Learning Objectives

Pharmacists

1. Explain the imperative changes in healthcare and their impact on pharmacy practice.
2. Analyze the ASHP Pharmacy Forecast and its role in strategic planning.
3. Discuss the role of the Pharmacy Forecast on student professional development.
4. Create and support discussions around preparing the next generation of pharmacists for practice model changes.

Technicians

1. Explain the imperative changes in healthcare and their impact on pharmacy practice.
2. Analyze the ASHP Pharmacy Forecast and its role in strategic planning.
3. Create and support discussions around preparing the next generation of technicians for practice model changes.

Changing Healthcare Landscape

- U.S. healthcare system is the most expensive in the world
- U.S. ranked last compared to other nations:
  - Quality Care, Access, Efficiency, Equity, Healthy Lives
- Quadruple Aim Theory:
  - Health Outcome
  - Patient Experience
  - Cost
  - Workforce Wellness and Resilience
- Affordable Care Act and Bundled Payments
  - Shift from volume to value
  - Shift from acute care to preventative care

Davis K, et al. The Commonwealth Fund 2014;1-32. Hartman M, et al.
Health Affairs 2015;34(1):1-11.
Bodenheimber T, Sinksy C. Annals of Family Medicine 2014;12:573-6. Whittington JW, et al.
Milbank Q 2015;93(12):263-300.

Changing Healthcare Landscape

- Increasing US health care spending (GDP ~17.7%)
- Aging population with extended lives
- Rising prevalence of adults with multiple chronic diseases
- Almost half of US population with least one chronic disease
  - ≥ 2 prescription drugs: 25-31%
  - ≥ 5 prescription drugs: 6-11%

Hartman M, et al. Health Affairs 2015;34(1):1-11.
Triple Tree. www.triple-tree.com (accessed 2016 Jan 30). Gu Q, et al. *NCHS Data Brief*. 2010;42:1-8.

Changing Healthcare Landscape

- Shortage of primary care practitioners
  - HRSA estimates ~7,000 additional primary care physicians needed in underserved areas
- Egregious drug price increases and shortages
- CMS 'Meaningful Use' requirements in information technology
- Big data and analytics impacting decision making

Health Resources & Services Administration. http://bhpr.hrsa.gov/healthworkforce/supplydemand/medicine/physician2020projections.pdf (accessed 2016 Jan 30).
New York Times. http://www.nytimes.com/2016/01/29/us/drug-shortages-forcing-hard-decisions-on- rationing-treatments.html (accessed 2016 Jan 30)
Bates DW, et al. HEALTHAFFAIRS2014;33(7):1123-31.

Number of People with Chronic Conditions

- 1995
  - Around 119 million people with chronic conditions
- 2030
  - Estimates are around 165 million people
  - Over 49% of the population

Triple Tree. www.triple-tree.com (accessed 2016 Jan 30).

Use of Multiple Prescriptions Drugs By Age

- People 60 years of age and older at most risk for polypharmacy
  - 1 medication : 12%
  - 2 medications : 12.4%
  - 3-4 medications : 27.3%
  - 5 or more drugs : 36.7%

Triple Tree. www.triple-tree.com (accessed 2016 Jan 30).

JAMA The Journal of the American Medical Association

Home | Current Issue | All Issues | Online First | Collections | CME | Multimedia | Q

November 3, 2015, Vol 314, No. 17 >

< Previous Article | Next Article >

Original Investigation | November 3, 2015

Trends in Prescription Drug Use Among Adults in the United States From 1999-2012 FREE

Elizabeth D. Kantor, PhD, MPH[1,2]; Colin D. Rehm, PhD, MPH[3,4]; Jennifer S. Haas, MD, MSc[5,6]; Andrew T. Chan, MD, MPH[7,8,9]; Edward L. Giovannucci, MD, ScD[1,7,10]

[+] Author Affiliations

The Advisory Board Company

ABOUT | SERVICES | AREAS OF EXPERTISE | EVENTS | BLOGS | CAREERS

Six in 10 American adults take Rx drugs. Here's what they're taking.

Twice as many American adults are taking five or more drugs than a decade ago

10:19 AM - November 5, 2015

Kantor ED, et al. JAMA. 2015;314(17):1818-31.

10 most concerning issues hospital CEOs cited for 2018

1. Financial challenges
2. Governmental mandates
3. Patient safety and quality
4. Personnel shortages
5. Behavioral health/addiction issues
6. Patient satisfaction
7. Access to care
8. Physician-hospital relations
9. Technology
10. Population health management

Becker's Hospital Review. https://www.beckershospitalreview.com/finance/no-1- community-hospital-ceo-worry-in-2018-money.htmll (accessed 2019 February 2).

Opportunities and Impact on Pharmacy Practice

- Population health management
  - Ambulatory clinics
  - Adherence packaging and mail order
  - Specialty Pharmacy
  - Partnerships
- Accountable Care Organizations (ACO)
- Big data and predictive analytics
- Formulary management to mitigate impact due to drug price increases and shortages

American Society of Health-System Pharmacists (ASHP)

Vision:

- Medication use will be optimal, safe, and effective for all people all of the time.

Mission:

- The mission of pharmacists is to help people achieve optimal health outcomes. ASHP helps its members achieve this mission by advocating and supporting the professional practice of pharmacists in hospitals, health systems, ambulatory clinics, and other settings spanning the full spectrum of medication use. ASHP serves its members as their collective voice on issues related to medication use and public health.

American Society of Health-System Pharmacists. http://www.ashp.org/menu/AboutUs/ASHP-Mission-Vision.html (accessed 2016 Jan 30).

ASHP's Core Strengths

- Advocacy
- Career Services
- Continuing Education
- Drug Information
- Meetings and Conferences
- Professional Policies and Practice Standards
- Publishing
- Residency and Technician Training Accreditation

American Society of Health-System Pharmacists. http://www.ashp.org/menu/AboutUs/ASHP-Mission-Vision.html (accessed 2016 Jan 30).

ASHP Research and Education Foundation

Vision:

- As the philanthropic arm of ASHP, our vision is that patient outcomes improve because of the leadership and clinical skills of pharmacists, as vital members of the healthcare team, accountable for safe and effective medication use.

Mission:

- The mission of the ASHP Foundation is to improve the health and well-being of patients through appropriate, safe and effective medication use.

American Society of Health-System Pharmacists. http://www.ashp.org/menu/AboutUs/ASHP-Mission-Vision.html (accessed 2016 Jan 30).

ASHPF's Core Strengths

- Leadership Program Development
- Clinical Training Program Development
- Research Designed to Support Practice Advancement
- Pharmacy Practice Tool Development
- Convening Consensus-Building Conferences

American Society of Health-System Pharmacists. http://www.ashp.org/menu/AboutUs/WhatWeDo (accessed 2016 Jan 30).

Pharmacy Forecast

Purpose:

- To improve the effectiveness of leaders in hospital and health-system pharmacy practice

Overview:

- Predicts developments in eight domains likely to challenge pharmacy leaders in hospitals and health-systems
- Presents more than 40 authoritative, actionable strategic recommendations to pharmacy practice leaders

ASHP Foundation. http://www.ashpfoundation.org/MainMenuCategories/CenterforPharmacyLeadership-/Pharmacy-Forecast (accessed 2016 Jan 30).

Pharmacy Forecast

Overview (continued):

- Reports survey results of trend watchers in health-system pharmacy and analyzes predicted trends
- Trend reports from ASHP Research and Education Foundation's Center for Health-System Pharmacy Leadership
- *Supported by the David A. Zilz Leaders for the Future Fund*

ASHP Foundation.
http://www.ashpfoundation.org/MainMenuCategories/CenterforPharmacyLeadership/Pharmacy-Forecast (accessed 2016 Jan 30).

Pharmacy Forecast

Methodology:

- Appointed Forecast Panel (FP) completes a questionnaire
- Survey asks likelihood of certain trends occurring over next five years
- Experts recruited to write a brief chapter for each domain
- Each chapters presents the survey results, authors assessment of predictions and strategic recommendations

ASHP Foundation. http://www.ashpfoundation.org/MainMenuCategories/CenterforPharmacyLeadership/Pharmacy-Forecast (accessed 2016 Jan 30).

Pharmacy Forecast: Emerging Trends

DISRUPTIVE FORCES IN HEALTHCARE

PUBLIC HEALTH IMPERATIVES

DATA, ANALYTICS AND TECHNOLOGY

THERAPEUTIC INNOVATION

PHARMACY AND HEALTH-SYSTEM LEADERSHIP

DRUG DEVELOPMENT AND THERAPEUTICS

HEALTHCARE DELIVERY AND FINANCING

ETHICS

PHARMACY WORK FORCE

PATIENT EMPOWERMENT

HEALTH INFORMATION TECHNOLOGY

REGULATORY REQUIREMENTS

HEALTH SYSTEM OPERATIONS

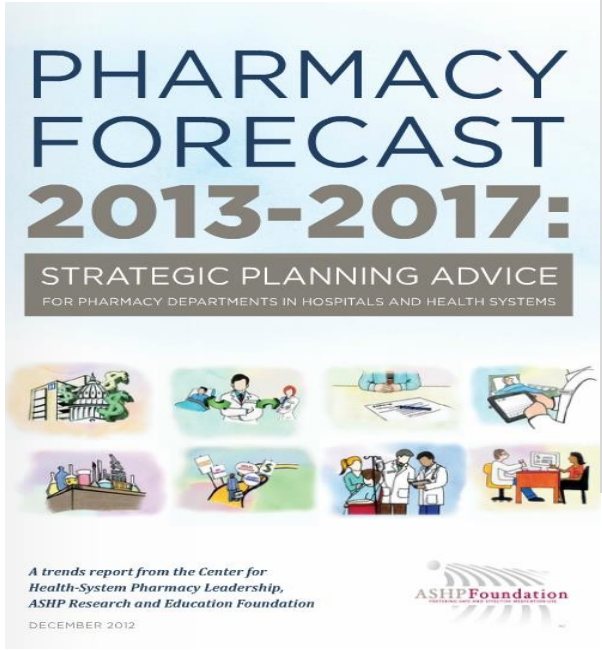
PHARMACY EDUCATION

POPULATION HEALTH MANAGEMENT

ADVANCED PHARMACY TECHNICIAN ROLES

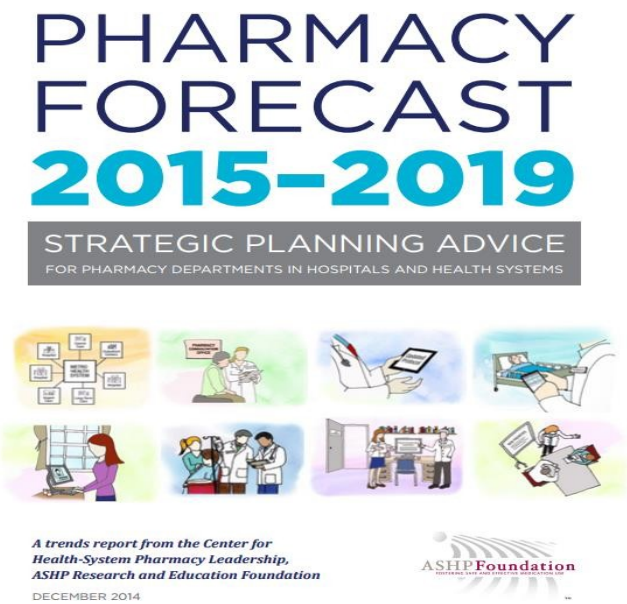
BUSINESS OF PHARMACY

Pharmacy Forecast

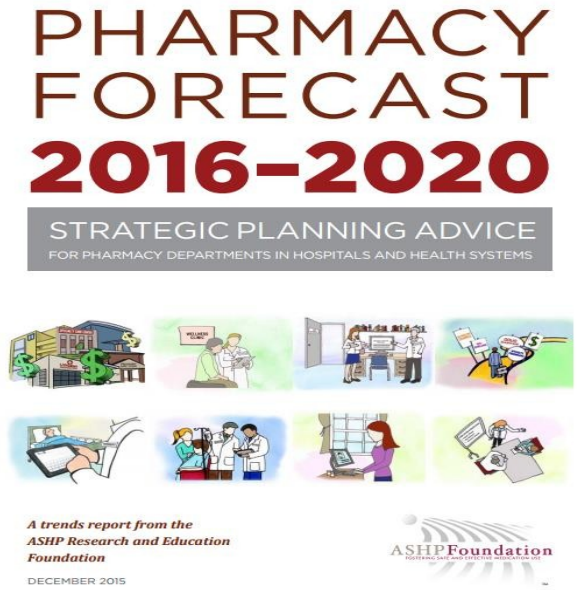


1st Edition

2nd Edition



3rd Edition



4th Edition

ASHP Foundation. http://www.ashpfoundation.org/MainMenuCategories/CenterforPharmacyLeadership/Pharmacy-Forecast (accessed 2016 Jan 30).

Pharmacy Forecast

5th Edition

6th Edition

7th Edition

Pharmacy Staff Professional Development

How is this relevant for pharmacy staff?

- Understand emerging trends and predicted challenges
- Promote thought provoking discussions and research
- Potential topics for journal clubs, presentations and interview questions (i.e. internship, residency, career opportunities)
- Prepare for the future!

Pharmacy Forecast: Discussion of Domains

- Take a ‘vote’ of questions from actual Forecast
- Provide overview of key domains
- Compare our voting outcomes to the Forecast Panel

Forecast Question #1

The number of graduates of accredited PharmD programs will decline by at least 10%.

A. Very Likely
B. Somewhat Likely
C. Somewhat Unlikely
D. Very Unlikely

1. Future of Pharmacy Education and Workforce

- Changes to student training, supply, and demand
- New utilization of pharmacy technicians
  - Specialized roles
  - Education requirements
  - Career ladders / lattices
- Pharmacy executive leadership opportunities
- Implementation of Telepharmacy
  - New jobs and training
- Effects of burnout / resiliency

Eddington MD, Gourdine MC. Future of pharmacy education and workforce. Am JHealth-System Pharm 2018; 76:76-78.

Training Needs of Pharmacist Extenders

Increase in number of PGY-1positions

Define advanced technician practice roles, train, and incentivize

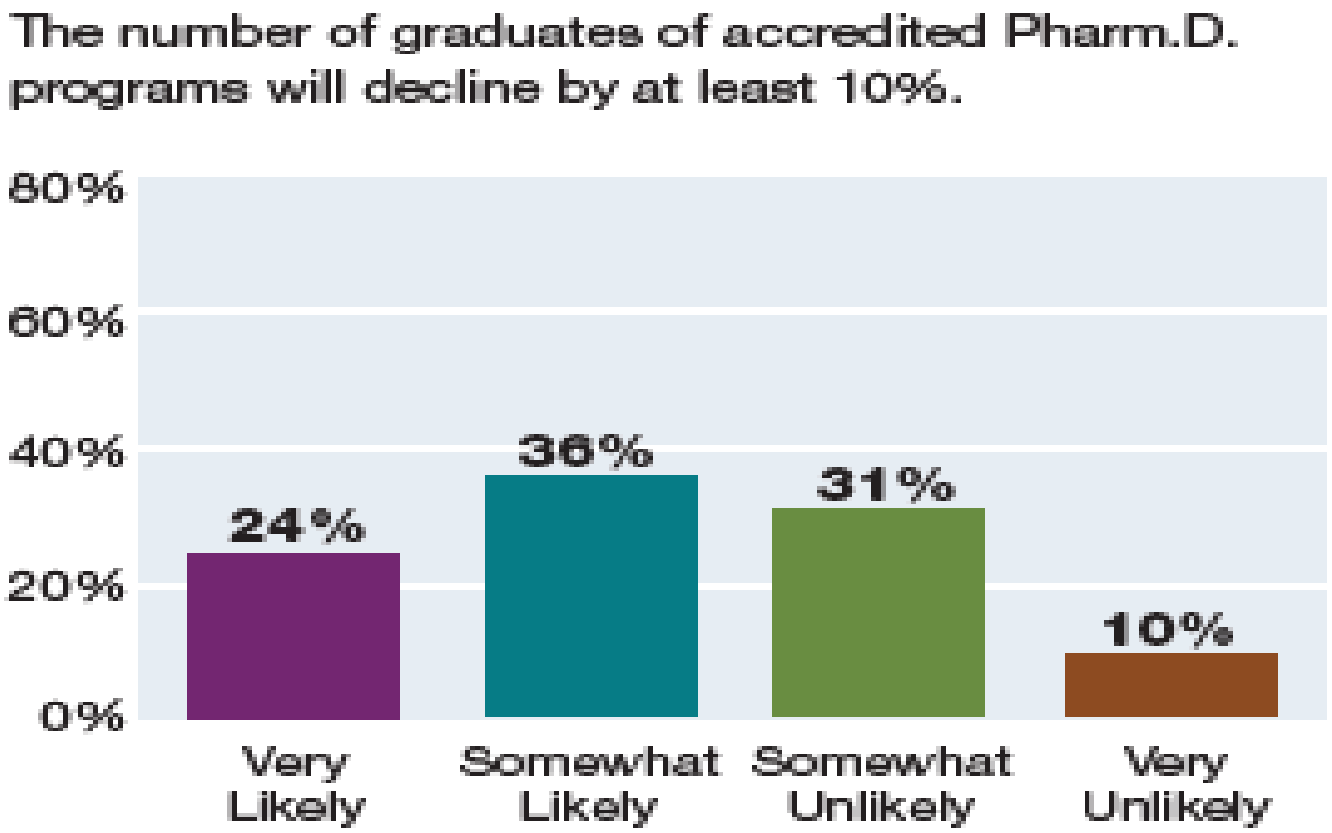
Reduce pharmacy school class size to align with workforce trends

Pharmacist Roles: Upward and Outward

- **Upward**: recruit pharmacists in C-suite positions, technicians working at the top of their licensure
- **Outward**: utilize remote pharmacist oversight to decrease shortage in rural and underserved areas

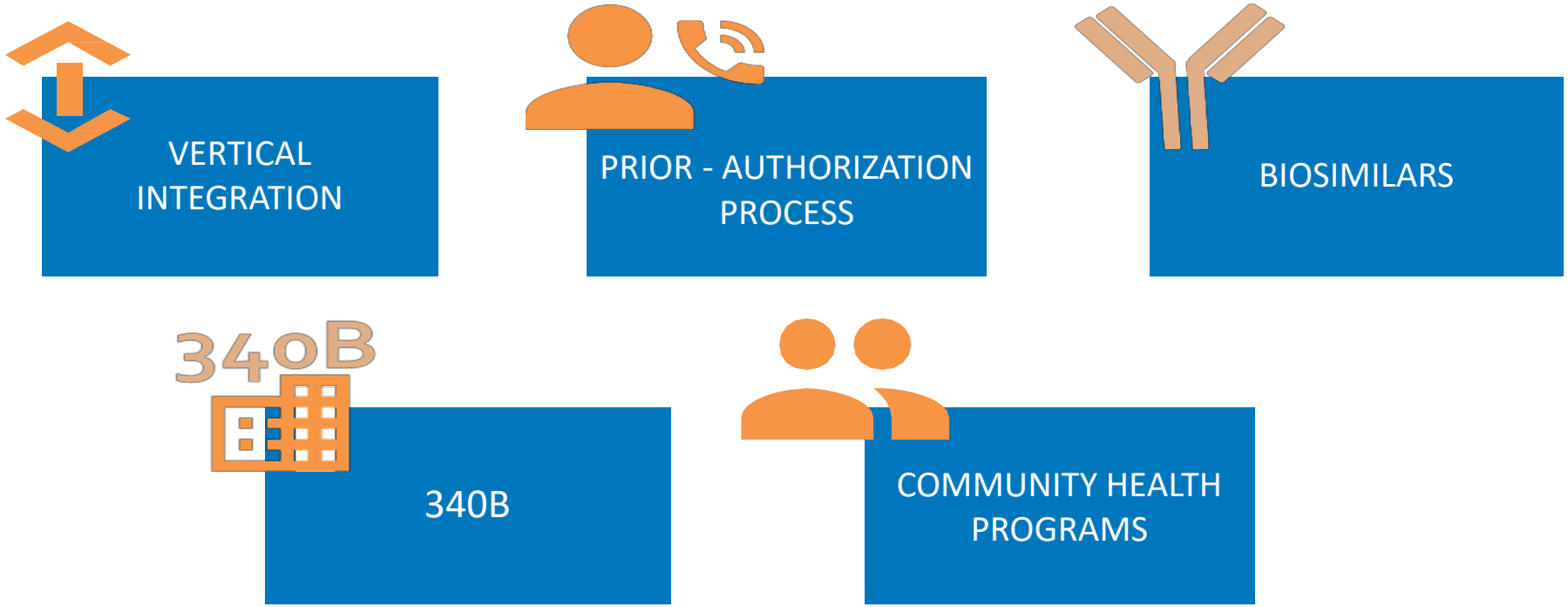
Eddington MD, Gourdine MC. Future of pharmacy education and workforce. Am JHealth-System Pharm 2018; 76:76-78.

Forecast Response #1



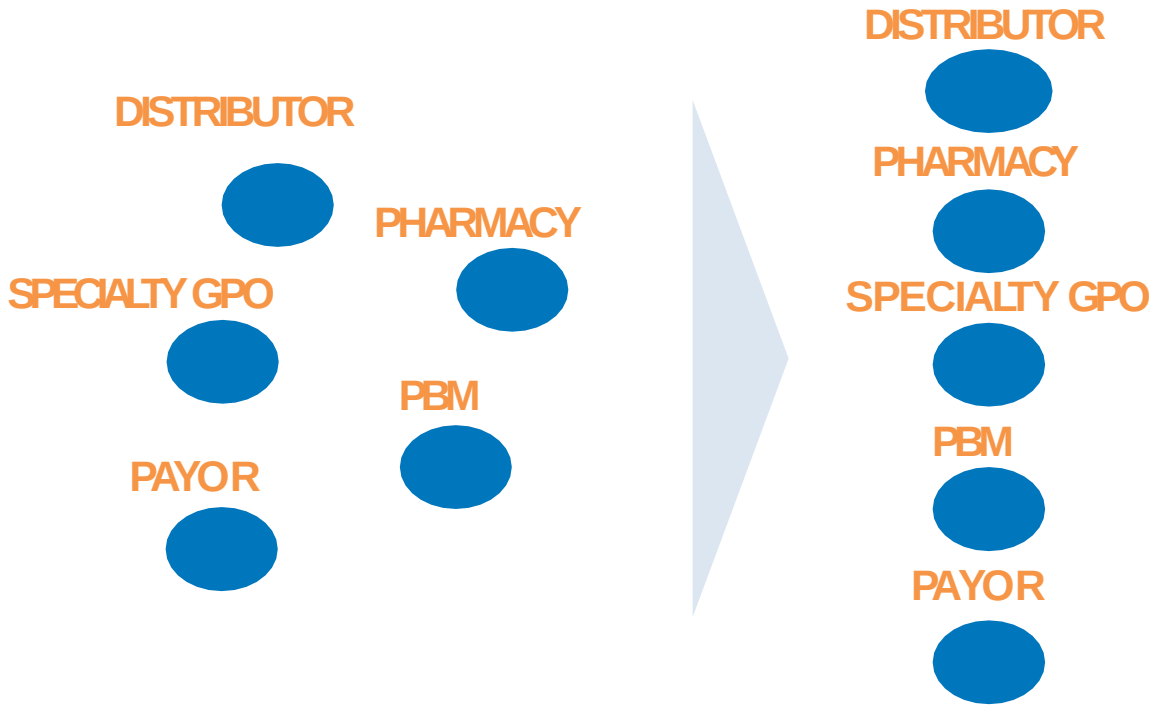
Lee C. Vermeulen, Jill Kolesar, M. Lynn Crismon, Allen J. Flynn, James G. Stevenson, Philip J. Almeter, W. Mike Heath, G. Tyler Short, Sharon Murphy Enright, Pam Ploetz, Meghan D. Swarthout, William A. Zellmer, Rafael Saenz, Debra S. Devereaux, David A. Zilz, James M. Hoffman, William E. Evans, Scott J. Knoer, Max D. Ray, ASHP Foundation Pharmacy Forecast 2018: Strategic Planning Advice for Pharmacy Departments in Hospitals and Health Systems, *American Journal of Health-System Pharmacy*, Volume 75, Issue 2, 15 January 2018, Pages 23–54, https://doi.org/10.2146/sp180001

2. Medications: Key Drivers of Healthcare Finance and Care Delivery

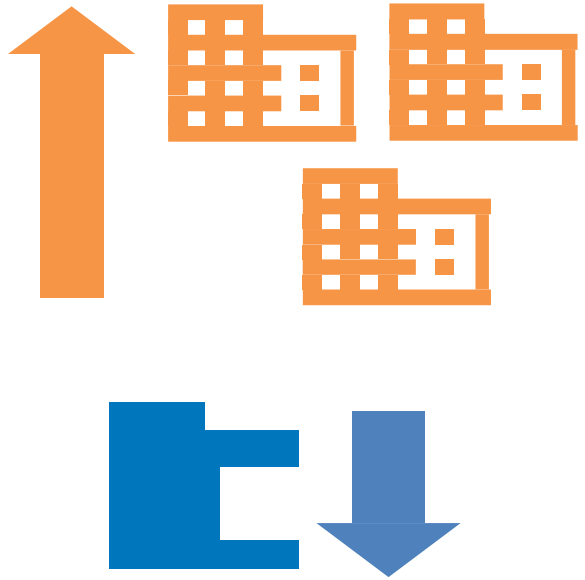


Jorgenson J, Kvancz DA. Medications are key drivers of healthcare finance and care delivery. Am JHealth-System Pharm 2018; 76:80-82.

VERTICAL INTEGRATION



INDEPENDENT HOSPITALS



Jorgenson J, Kvancz DA. Medications are key drivers of healthcare finance and care delivery. Am JHealth-System Pharm 2018; 76:80-82.

Population Health Management

- Shared risk and savings between payers and providers
- ACOs
- Formulary Management
- Targeting high-risk patients
- Pharmacist and technician staffing support
  - Home visit programs
  - Accountable care agreements
  - Counseling and drug adherence

3. The Opioid Crisis

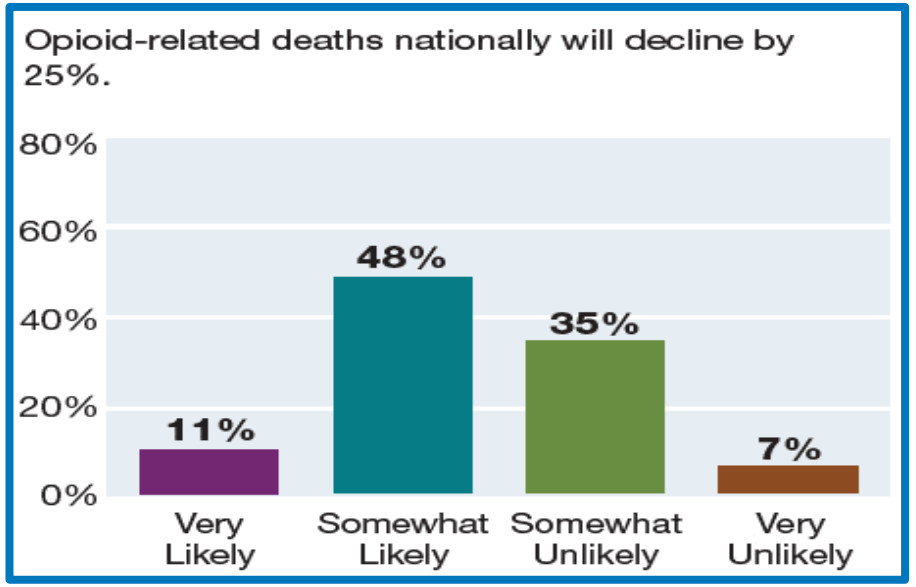
> 350,000

Fatal opioid overdoses between 1999-2016

> 47,000

Fatalities in 2017

"How likely is it that the following will occur by the year 2023 in the geographic region where you work?"



Nesbit SA, Bicket MC. The opioid crisis. Am JHealth-System Pharm 2018; 76:83-85.

Opioid Stewardship

PRESCRIPTION DRUG MONITORING PROGRAMS (PDMP)

INTEGRATED MULTIDISCIPLINARY PAIN CONSULTATION SERVICES

NALOXONE PROGRAMS

CDC GUIDELINE: PRESCRIBING OPIOIDS FOR CHRONIC PAIN

DRUG TAKE-BACKS
DROP BOXES
DRUG DISPOSAL KITS

Nesbit SA, Bicket MC. The opioid crisis. Am JHealth-System Pharm 2018; 76:83-85.

Patient Care Initiatives

SCREENING, BRIEF INTERVENTION, AND REFERRAL TO TREATMENT

MEDICATION ASSISTED THERAPY

NONPHARMACOLOGIC TREATMENTS

Pharmacists should help strike a balance between opioid stewardship and optimal pain management, there are also certification programs for pharmacy personnel

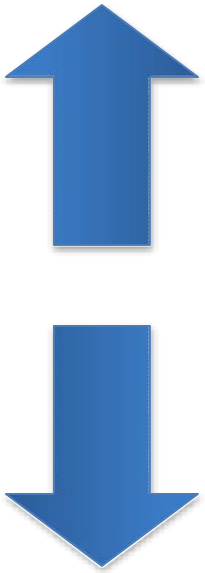
Nesbit SA, Bicket MC. The opioid crisis. Am JHealth-System Pharm 2018; 76:83-85.

Forecast Question #2

At least 10% of health systems will have a policy that prohibits practitioners from choosing among alternative treatments based primarily on the basis of maximizing revenue.

A. Very Likely
B. Somewhat Likely
C. Somewhat Unlikely
D. Very Unlikely

4. Ethical Issues: Conflicting Imperatives and Erosion of Behavioral Norms



Respect for patient autonomy

Honoring scientific evidence

Economic imperatives

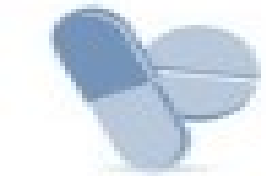
Professional obligations

Expansive data

Secret uses of big data

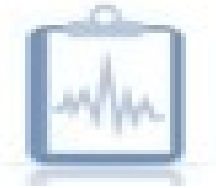
Zellmer WA, Hine A. Ethical issues: conflicting imperatives and erosion of behavioral norms. Am JHealth-System Pharm 2018; 76:86-88.

Ethical Implications



RIGHT TO TRY

- Freedom of choice
- Freedom of speech
- Reach of government
- Patient autonomy
- Scientific truth



HARVESTING PATIENT DATA

- Right to privacy
- Need for individuals to grant consent

Conflicts of Interest

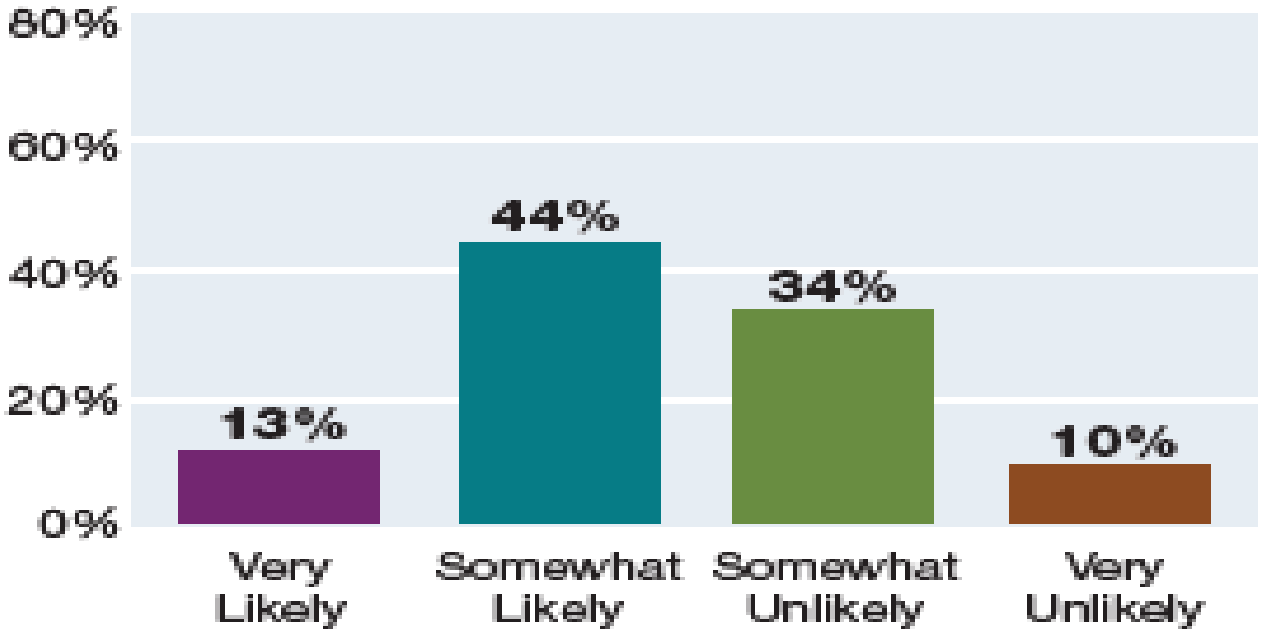
INSTITUTIONS

INDIVIDUALS

Zellmer WA, Hine A. Ethical issues: conflicting imperatives and erosion of behavioral norms. Am JHealth-System Pharm 2018; 76:86-88.

Forecast Response #2

At least 10% of health systems will have a policy that prohibits practitioners from choosing among alternative treatments based primarily on the basis of maximizing revenue.



Lee C. Vermeulen, Jill Kolesar, M. Lynn Crismon, Allen J. Flynn, James G. Stevenson, Philip J. Almeter, W. Mike Heath, G. Tyler Short, Sharon Murphy Enright, Pam Ploetz, Meghan D. Swarthout, William A. Zellmer, Rafael Saenz, Debra S. Devereaux, David A. Zilz, James M. Hoffman, William E. Evans, Scott J. Knoer, Max D. Ray, ASHP Foundation Pharmacy Forecast 2018: Strategic Planning Advice for Pharmacy Departments in Hospitals and Health Systems, *American Journal of Health-System Pharmacy*, Volume 75, Issue 2, 15 January 2018, Pages 23–54, https://doi.org/10.2146/sp180001

5. Technology Innovations and Involvement by Pharmacy Leaders

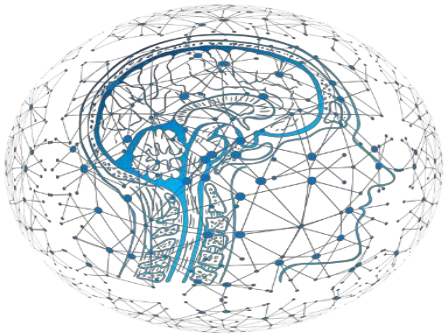
Belford S, Peters SG. Technology innovations and involvement by pharmacy leaders. Am J Health-System Pharm 2018; 76:89-91.

Data and Technology

- Expanded use of EHRs
- Meaningful Use initiatives
- Dashboards and Performance Indicators
- Data integration
- Demands for automation and technology

Artificial Intelligence

- Likely will reduce pharmacists time spent on routing drug selection and dosing by 25%
- Pharmacists will likely play a primary role in clinical decision support in prediction models and prescribing algorithms
- Advanced roles for technician support as well
  - Automation analysts
  - Data writers



Health Information Integration

- Increase sharing of patient health information with community pharmacists

Belford S, Peters SG. Technology innovations and involvement by pharmacy leaders. Am J Health-System Pharm 2018; 76:89-91.

Forecast Question #3

At least 75% of health systems will include pharmacists as patient care providers in nearly all specialty care clinics.

A. Very Likely
B. Somewhat Likely
C. Somewhat Unlikely
D. Very Unlikely

6. Pharmacy in Patient Care

Knoer SJ, Cosgrove DT. Pharmacists in Patient Care. Am J Health-System Pharm 2018; 76:95-97.

Pharmacy's Role in Value Based Payment

Value-based financial models

- Improve quality
- Decrease cost

Pharmacist/Technician roles

- Achieve goals faster and consistently maintain outcomes
- Reducing readmissions, demonstrating higher patient adherence to care recommendations, and providing evidence of outcomes
- Information integration into the patient's medical record

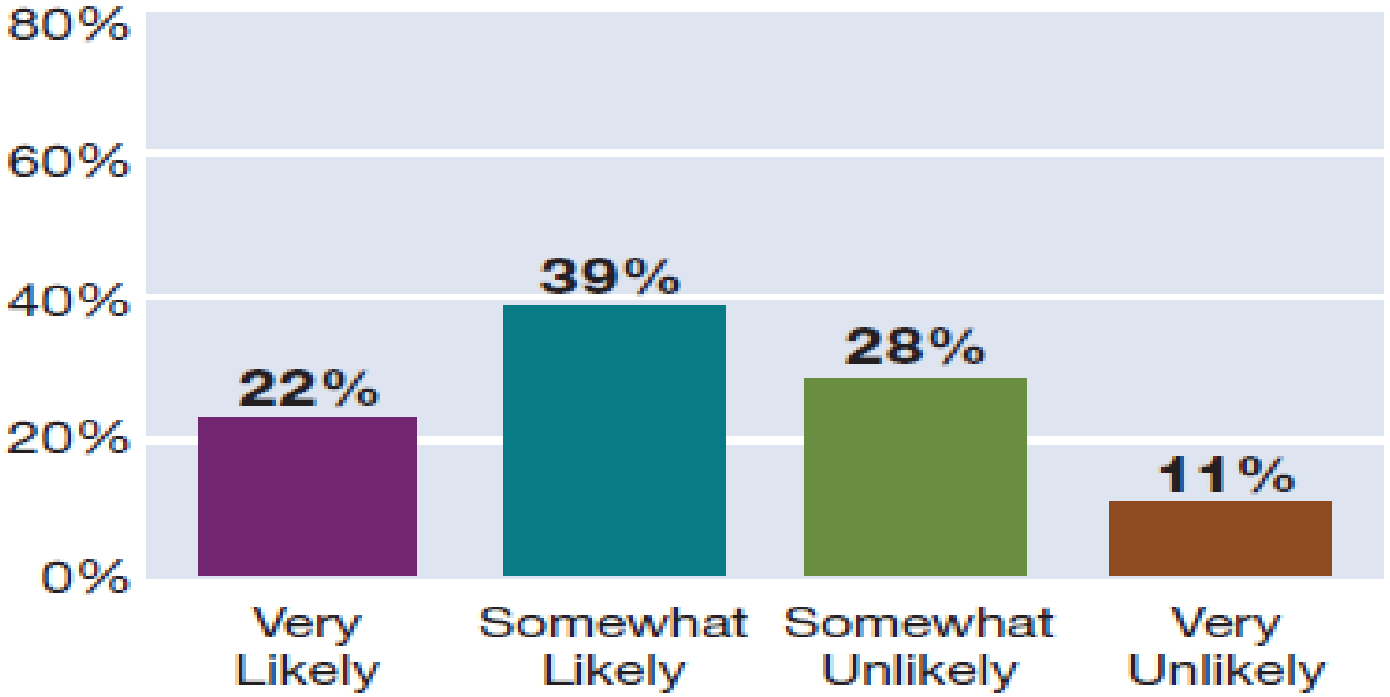
$$\text{Value} = \frac{\text{Quality}^{*}}{\text{Payment}^{\wedge}}$$

* A composite of patient outcomes, safety, and experiences
^ The cost to all purchasers of purchasing care

Knoer SJ, Cosgrove DT. Pharmacists in Patient Care. Am J Health-System Pharm 2018; 76:95-97.

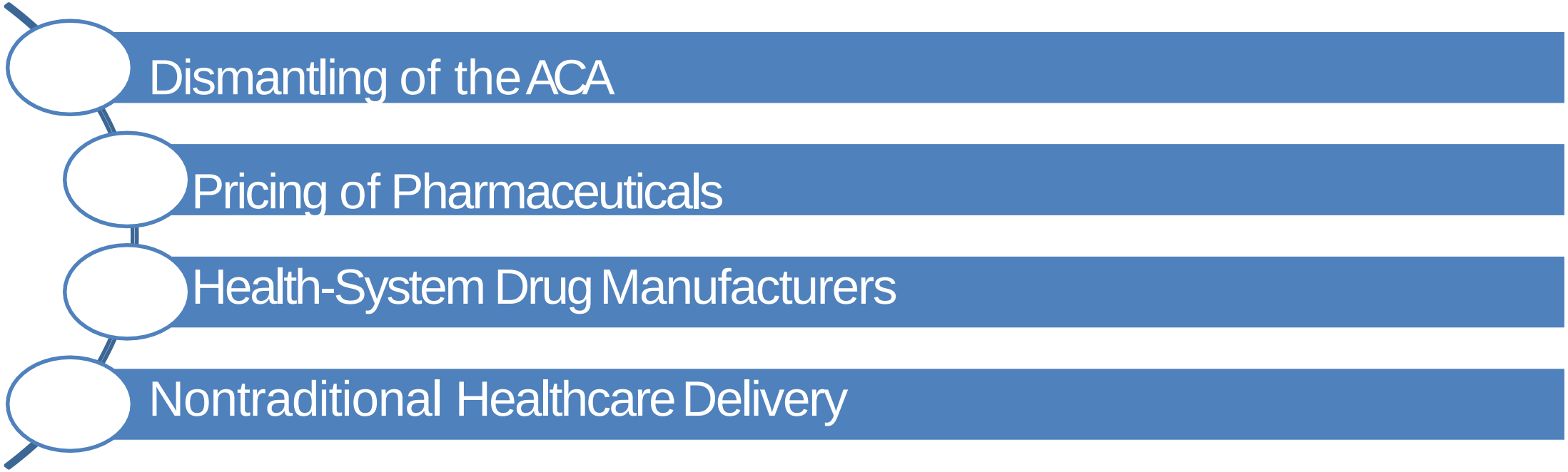
Forecast Response #3

At least 75% of health systems will include pharmacists as patient care providers in nearly all specialty care clinics.



Lee C. Vermeulen, Jill Kolesar, M. Lynn Crismon, Allen J. Flynn, James G. Stevenson, Philip J. Almeter, W. Mike Heath, G. Tyler Short, Sharon Murphy Enright, Pam Ploetz, Meghan D. Swarthout, William A. Zellmer, Rafael Saenz, Debra S. Devereaux, David A. Zilz, James M. Hoffman, William E. Evans, Scott J. Knoer, Max D. Ray, ASHP Foundation Pharmacy Forecast 2018: Strategic Planning Advice for Pharmacy Departments in Hospitals and Health Systems, *American Journal of Health-System Pharmacy*, Volume 75, Issue 2, 15 January 2018, Pages 23–54, https://doi.org/10.2146/sp180001

8. Disruptive Forces in Healthcare

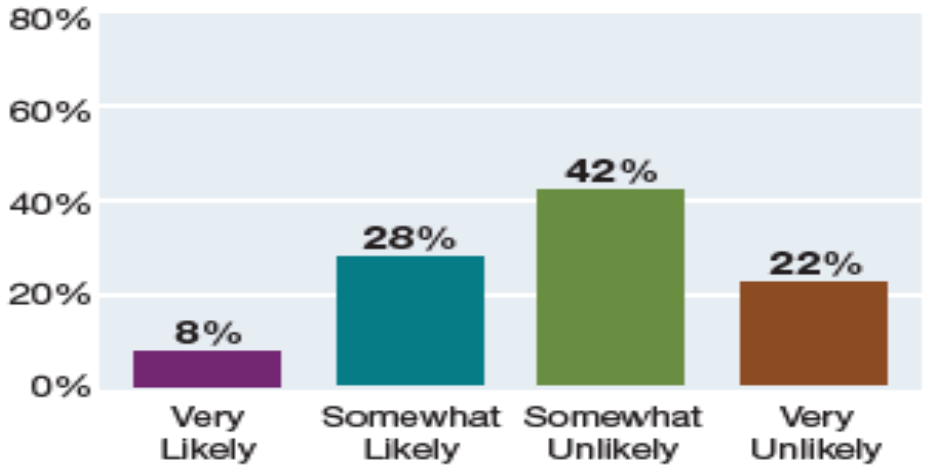


Kent SS, Clark JS. Disruptive forces in healthcare. Am J Health-System Pharm 2018; 76:98-100.

Dismantling The Affordable Care Act

In times of uncertainty, pharmacists should continue to showcase the value brought to continuum of care

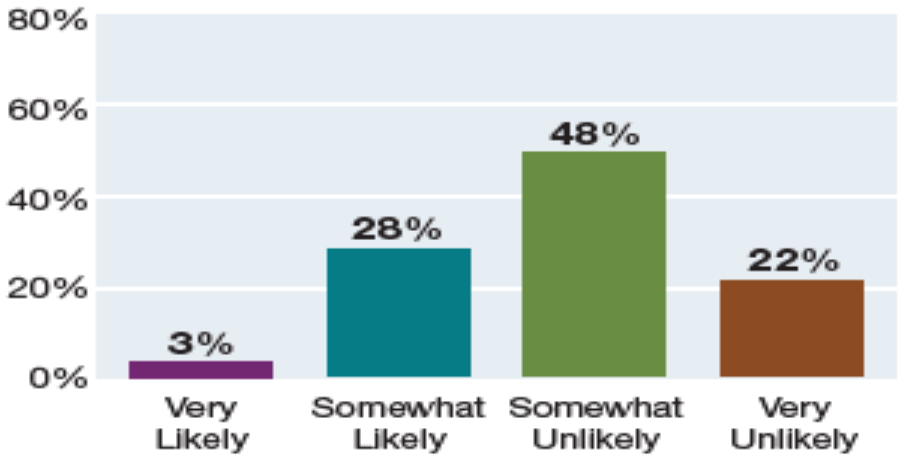
1 The dismantling of the Affordable Care Act will cause nearly all health systems to substantially reduce their commitment to population health.



DRUG MANUFACTURING IN HEALTH SYSTEMS

Do not anticipate seeing real impacts of this disruptor for at least 10 years

4 Drug manufacturing by a consortium of health systems will reduce the number of drug shortages by 50%.



Kent SS, Clark JS. Disruptive forces in healthcare. Am J Health-System Pharm 2018; 76:98-100.

Role of the Pharmacy Forecast

- Strategic planning
- Analyzing trends
- Educating executive leaders
- Pharmacy education
- Leadership development
- Preparing the next generation of technicians and pharmacists

Post Activity Question #1

The American College of Clinical Pharmacy has called for pharmacists involved in the provision of “direct patient care” to have residency training by 2020.

The ASHP Forecast Report recommends that health systems must consistently increase slots to ensure that residency training .

- True or False?

Post Activity Question #2

The 340B program represents a significant opportunity for stretching scare resources but is facing escalating criticism from elements of the pharmaceutical and bio-tech industries, community oncology groups, members of Congress, and governmental agencies. Which of the following are key recommendations identified by the ASHP Forecast Report?

A. ASHP Forecast Report recommends that health systems must consistently increase slots to ensure that residency training
B. Pharmacists must recognize how the costs and margins of biosimilars drive financial outcomes and respond accordingly to protect their institution's financial performance.
C. Pharmacists should lead their health system's efforts around the 340B program to not only deliver the desired compliance results but also provide a clear delineation of exactly how 340B savings are deployed to provide care to vulnerable patient populations.
D. All the above

Post Activity Question #3

The changing healthcare landscape includes which of the following projections?

A. Shortages of primary care providers
B. Increases in drug prices and shortages
C. Growing needs for data analytics and technology
D. All of the above

Special Acknowledgments

Dorela Priftanji, PharmD, BCPS
PGY2-Health System Pharmacy Administration Resident The Johns Hopkins Hospital

Elissa King, PharmD, BCPS
PGY2-Health System Pharmacy Administration Resident University of North Carolina Medical Center

Ina Liu, PharmD
PGY1-Health System Pharmacy Administration Resident University of North Carolina Medical Center

James Blackmer, PharmD
PGY2-Health System Pharmacy Administration Resident Cleveland Clinic

Jordan Long, PharmD, MBA
PGY2-Health System Pharmacy Administration Resident
Cleveland Clinic

Katherine Sencion, PharmD, BCPS
PGY2-Health System Pharmacy Administration Resident University of Wisconsin Health

Stephanie Sollis, PharmD, MBA, BCPS
PGY2-Health System Pharmacy Administration Resident University of Kentucky

Long D. Trinh, PharmD, MS, MBA, BCPS
Oregon Health & Science University Inpatient,
Operations Manager
(At time of program development Dr. Trinh was PGY2- Health System Pharmacy Administration Resident, Cleveland Clinic, OH)

Brian Kempin, Pharm.D.
PGY2-Health System Pharmacy Administration Resident
University of Virginia Health System

Section of Pharmacy Practice Managers

Questions?

Pharmacy Forecast Case Workshop

Topics: Population Health Management, Data and Technology, Pharmacy Workforce

Population Health Management

Concepts Reviewed:

Aligning Incentives to Transform Care Delivery

- Payment reform reflected in savings-sharing between payers and providers
- Focus on formulary management
- Annual wellness visits includes evaluation of medications
- Post-discharge medication follow-up evaluations
- Enhance training in behavioral health medication
- Target panels of high-risk patients
- Provide medication –use education to long term care facilities

LOVED

- _
- _
- _
- _

LEARNED

- _
- _
- _
- _

LACKED

- _
- _
- _
- _

LONGED FOR

- _
- _
- _
- _

Data and Technology

Concepts reviewed

- Continuing to expand implementation of electronic health record
- Centers for Medication and Medication Services Meaningful use
- Supporting Quality Improvement
    - Define and implement pharmacy-specific performance indicators
    - Designing medication therapy related quality-of-care
    - Collaborate with other health systems to find best practices for clinical and operational activities
    - Integrate within the EHR real-time data from healthcare devices
    - Raise awareness for unintended consequences created by design flaws in the EHR

LOVED

- _
- _
- _
- _

LEARNED

- _
- _
- _
- _

LACKED

- _
- _
- _
- _

LONGED FOR

- _
- _
- _
- _

Pharmacy Workforce

Concepts Reviewed

- Aim to lower costs and improve patient outcomes
- Optimize pharmacy work force in new models of care
- Market Forces Stimulate Change in Pharmacy Practice Models
    - Develop pharmacist privileging process to achieve health-system goals
    - Maximize leveraging of all staff members
    - Focus on staff development to meet future plans of department
    - Advocate for provider status
    - Acknowledge pharmacy technicians as essential members of the team
    - Strategize to ensure adequate supply of PTCB-certified technicians.

Report Out Notes:

LOVED

- _
- _
- _
- _

LEARNED

- _
- _
- _
- _

LACKED

- _
- _
- _
- _

LONGED FOR

- _
- _
- _
- _

LOVED

LEARNED

LACKED

LONGED FOR