Bold Imperatives for Advancing Practice

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Conflict of Interest Declaration

I have no conflicts of interest related to the content of this presentation

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Objectives

- Describe the implications of current healthcare trends on the pharmacy profession and the immediate actions needed to respond.
- Identify essential pharmacy competencies
- Describe an innovative patient-centered model for pharmacy practice
- Describe approaches to demonstrating new value to stakeholders

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Big Picture Thinking and Being Bold

- **Trendbending**: process of shaping strategy or products based upon current trends, Faith Popcorn.[1]
- **Disruptive innovation**: process by which a product or service begins with simple applications at the bottom of a market and then aggressively moves up the market, eventually displacing established competitors, Clay Christensen

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Health-System Transformation

Traditional Acute Care Focus
Volume

- Episode-based
- Medical care
- Treatment of acute conditions
- Admissions
- Medication orders
- Outpatient revenue
- Oral medications mainstay for chronic diseases

Health and Wellness Focus
Value

- Patient-centered care
- Team-based care
- Preventing readmissions
- Transitions of care
- Patient's medication list
- Outpatient costs
- Specialty medications for chronic diseases

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HC Trend #1 Evolving Reimbursement Models: Volume vs. Value

Traditional reimbursement→ Risk-based models

- Traditional: DRGs, APCs, Per Diem, case rates, % charges,
- Risk-based Models: payment arrangements include financial and performance accountability for episodes of care
  - Walmart and Lowe's: bundled payment for hip and knee implants for their employees at 4 health-systems with no employee deductible or co-insurance
  - CMS Bundled Payments for Care Improvement Initiative[2]

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CMS Bundled Payments for Care Improvement Initiative

	Model 1	Model 2	Model 3	Model 4
Episode	Acute care, All DRGs	Selected DRGs, plus post-acute period	Selected DRGs, **post-acute period only**	Selected DRGs, hospital plus readmissions
Bundled Services	All Part A inpt stay	Part A and B during inpt stay, post-acute period and readmissions, 30, 60 or 90 days post D/C	Part A and B services during the post-acute period and readmissions, 30, 60 or 90 Days post D/C	Part A and B services during inpt stay and readmissions
Payment	Retrospective	Retrospective	Retrospective	**Prospective**

Defining Risk

- Models 2 and 3 bundle
  - MD services, post-acute providers, related readmissions and Medicare Part B services: i.e., laboratory services; DME, prosthetics, supplies and **Part B drugs**.
- **Target price:** historical fee for service payments plus discount.
- **Shared Savings:** Any decrease in expenditures<target price will be paid to participant and may be shared among provider partners
- **Risk:** Any expenditures >target price will be repaid to Medicare

Prospective Payment Bundling

Model 4: Acute Care Hospital Stay Only

- Single, prospectively determined bundled payment encompasses all services furnished by hospital, physicians, and other practitioners.
- Physicians and other practitioners will be paid out of the bundled payment.
- All services furnished during related readmissions for 30 days after hospital discharge included in bundled payment
- Participants can select up to 48 different clinical episodes.

Polling Question?

Risk-based models pay separately for medications

True

Fale

Implications

- What pressure points are created by these new reimbursement models?
- How are we transforming our Pharmacy Practice Models to focus on value?
- Are we integrating accountability for cost and performance into training of pharmacists and technicians?

HC Trend #2 Team-Based Care

- "Principles Supporting Dynamic Clinical Care Teams-American College of Physicians Position Statement," Sept 2013.3
  - Shift from clinicians practicing independently to groups of MDs, RNs, PAs, clinical pharmacists, social workers and other clinicians to meet patient needs
  - Nimble, adaptable partnerships to encourage teamwork, collaboration
  - Matching pt with team member(s) most qualified to deliver care
  - Collaborative team models needed to address MD shortages

HC Trend #2 Team-Based Care

- Patient Safety and Clinical Pharmacy Services Collaborative: team-based care for underserved patient populations ; >13,000 pts/yr.4
- Why Pharmacists Belong in the Medical Home", 2010 Health Affairs. 5
- Pre-requisite: Interdisciplinary Skills
  - IOM report recommended restructuring health professional education
  - Interprofessional Education Collaborative
    - Goal to integrate education of healthcare professionals on health sciences campuses
    - Sites include: Northeast Ohio Medical University College of Pharmacy, UCSD, University of Kentucky

Implications

- What is the role of pharmacy students, residents and technicians on interdisciplinary teams?
- How are we preparing our staff to play an active role on teams?

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HC Trend #3 Advancement of the Nursing Profession

- IOM Report on Future of Nursing provides a roadmap. 1
- Nursing is positioned to play key role in Healthcare Reform
  - Advance practice nurses (NPs) are a solution for primary care MD shortage and part of medical home; CVS and Walgreen models for NPs in clinics
  - "Boosting nurse staff levels could reduce readmissions"6
- Developed research infrastructure 20 yrs ago which demonstrates positive outcomes resulting from nursing actions
  - Nursing sensitive-indicators: relationship between staffing levels and pt outcomes; adopted by regulatory agencies and National Quality Forum
- Gallup Poll #1 since 1999, except 1 year

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Implications

- How do we partner with the nursing profession to further define our respective roles in medication management?
- How can we learn from the important work nurses have done in development of nursing-sensitive indicators?

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HC Trend #4: Transitions of Care

- Transitions of Care initiatives to reduce readmissions 1
  - BOOST (better outcomes for older adults through transitions of care) focusing on the elderly
  - Project RED (re-engineering discharge)
- Save Medication Transitions 7
  - Up to 67% of admitted pts have unintended med discrepancies
  - Review of 12 studies :45% of patients had at least 1 clinically significant discrepancy or drug-related problem
  - Reported rates of inpatient med errors: 45% to 76% due to inaccuracies in medication histories and reconciliation

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HC Trend #4: Transitions of Care

- A variety of individuals (licensed and non-licensed) can enter medication information into traditional and electronic health records across different settings: MD offices, hospitals, community pharmacies, home health agencies, etc
- Errors introduced in any of these settings by any of these individuals can become "hardwired" into the patient record
- Clinicians rely on the information and prescribe medications that are listed even though the information may be inaccurate

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Polling Question?

Pharmacist and technicians play an important role in transition of care by:

A. Ensuring the accuracy of the medication list
B. Providing patient education
C. Post-discharge follow up of patients
D. All of the above

Implications

- Shouldn't transitions of care be a critical element of our practice model redesign?
- Shouldn't Pharmacy own responsibility for the accuracy of the patient's medication list across transitions of care?

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HC Trend #5 Chronic Disease Management 1

- 1 in 4 patients has 2 or more chronic diseases
- Accounts for 75% of healthcare costs
- Recent IOM report recommended 15 evidence-based prevention and disease mgmt. models which include specific pharmacy interventions
  - Tailored pharmaceutical plans for prevention
  - Pharmaceutical care
  - Inpatient comprehensive pharmacy programs
- Medicare supports an annual wellness visit under Medicare Part B which includes review of current medications

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Chronic Disease Management and Team-Based Care

Patient Safety Pharmacy Collaborative Results 4

- Results within 6-12 months:
  - Diabetes pts: 35% achieved desired A1c levels
  - Hypertension pts: 43% achieved desired BP
  - Pts with dyslipidemia and persistently high cholesterol levels: 37% achieved desired levels
- Uncontrolled asthma (32% achieved control),depression (11% improvement), HIV/AIDS (45% with improved viral levels)
- Decrease in adverse drug events (ADE) from 0.7 to 0.5/pt
- Decrease in potential errors/encounter from 1.5 to 0.8

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Implications

- Given this promising support of our role in chronic diseases, do we place sufficient emphasis on chronic medications during the time that patients are in our hospitals?
- Do we consistently evaluate chronic medications in the context of what the patient will need when they leave our premises?
- Do we follow up with these patients post-discharge and in our outpatient clinics?

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Implications

- Shouldn't every patient have at least an annual review of their medication list by a pharmacist as a prevention strategy?
- Wouldn't high risk patients benefit from a more frequent, perhaps quarterly medication review or "therapeutic tune-up"?
- Can we demonstrate reduced costs and better patient outcomes which would support the inclusion of this function as a national quality or pharmacy-sensitive indicator?

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HC Trend #6: Specialty Pharmacy[1]

- Emergence of biologics and other advances for chronic debilitating diseases
- Represent 1/3 of national total drug costs
  - $75.8 billion in 2010
- Approx. 20% growth/year
- 40% of drugs in pipeline
- By 2016, estimate that 50% of top 100 drugs and 8 of top 10 will be specialty
- Anticipate that by 2017 will account for 45% of a health plan's total drug expenses

HC Trend #6: Specialty Pharmacy

- Represents 1-5% of population
- Cost of up to $350,000 year
- Biosimilars will bring new challenges
  - Competencies: patient selection and education, storage, preparation, reimbursement, monitoring effectiveness and safety
- Restricted Drug Distribution Channels
- Transitions of care considerations
- Need for clinical, operational and financial knowledge and skills

Polling Question?

Specialty pharmacy

A. Is growing at a rate of 20% per year
B. Includes biologics and other high cost medications
C. Represents 1-5% of the population
D. All of the above

Implications

- Are we providing pharmacy students, residents and staff with sufficient clinical training in specialty pharmacy therapeutics?
- Should transitions of care programs prioritize pts who are on specialty drugs? Including health-system employees?
- Should specialty pharmacy be an area for advanced residency training programs?

HC Trend #7: Health Literacy and Adherence [1]

- Low health literacy effects 9/10 pts
- Poor adherence costs approx. $100 billion/yr
- AHRQ Pharmacy Health Literacy Center and Toolkit
  - Universal Precautions: minimize risk that pts will not understand information about health or treatment
  - Use of teach back to verify health literacy

Implications

- Isn't it imperative that we integrate medication literacy into education of pharmacy students, residents and staff? Do pharmacists routinely use "teach back" when educating patients?
- Have we identified assessment of patient adherence and literacy as core responsibilities of health-system pharmacists?
- Do patients with low literacy and/or adherence need post-discharge follow up by a pharmacist?

Trend #8 Cancer Care 1

- High cost chronic diseases
- Targeted cellular therapies will add costs and require special knowledge and skills
- Oncology pharmacy specialists already involved in team-based care
- Episode payment being piloted
- Health-systems are acquiring oncology practices in response to reduced chemotherapy margins and to advance integration of care
- Oncology medical home model provides new opportunities

Trend #8 Cancer Care

- Oral chemotherapy agents are transforming cancer care and require close follow up to manage side effects, ensure adherence and prevent drug interactions
- Biosimilars will require careful monitoring of efficacy and safety and patient education
- Lack of health literacy is a major challenge for cancer patients
- Ensuring safety of chemotherapy management with health IT systems is essential.
- On a national basis, pain management, palliative care and end of life management are patient care and economic priorities

Implications

- Although we have board-certified oncology specialists, are we training a sufficient cadre of pharmacists to meet the many dimensions of cancer care?
- Are we training leaders who understand and can manage the full scope of oncology services that are needed?
- Since cancer is a chronic disease, should this be a priority focus area for education and training just as hypertension and diabetes are to ensure that pharmacists possess the necessary knowledge and skills?

What do others think about us?

Expert Opinion from External Stakeholders 1

- Bruce Bagley, M.D., Medical Director for Quality Improvement for the American Academy of Family Physicians
- David Bates, M.D., Medical Director of Clinical and Quality Analysis at Partners HealthCare System
- Linda Burnes Bolton, Dr.P.H., R.N., FAAN, CNO, CSMC and Vice-Chair of the Initiative on the Future of Nursing IOM report, incoming President of American Organization of Nurse Executives
- Scott Weingarten, M.D., Co-founder, President, and CEO of Zynx Health, Senior VP, Transformation, CSHS
- C. Duane Dauner, CEO, California Hospital Association

Expert Opinion

- Priorities and actions need to be **relevant t**o the stakeholders with whom we interact.
- Pharmacists have a tendency to focus on **medications being prescribed** rather than whether the regimens are effective based on the **patients' clinical needs.**
- **Medication overuse**, specifically discontinuing medications that patients don't need, warrants more emphasis.
- Pharmacists do not always seek or **want to interact with patients.**
- Not all pharmacists have the same level of **expertise**.

Expert Opinion

- We need to leverage the contributions of **each team member** for the benefit of the patient **rather than on each discipline's specific role.**
- Significant improvement is needed in **handoffs t**o the patient's next level of care including community pharmacies.
- **Post-discharge follow up** with patients and/or caregivers is important to reduce errors and readmissions.
- We need to ensure **one source of truth** for the patient's medication list.

Polling Question?

Key observations by stakeholder include

A. Importance of focusing on overuse of medications

B. Ensuring handoffs as patients move across the care

C. Pharmacists do not always want to interact with patients

D. All of the above

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Advancing the Medication Use Process

http://www.old-map.com/antique-maps-of-the-world.htm

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Traditional Medication Use Process

Quality and Safety

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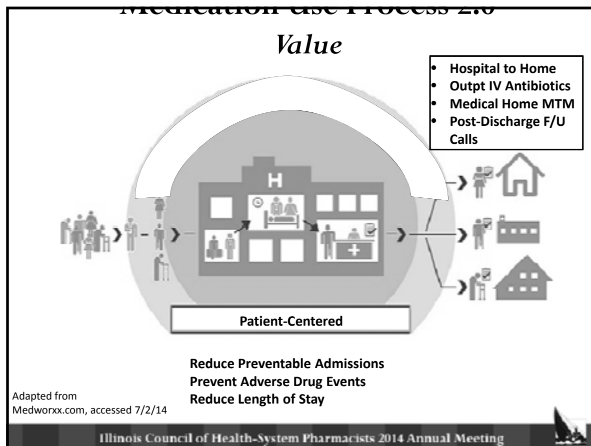

Adapted from Medworxx.com, accessed 7/2/14

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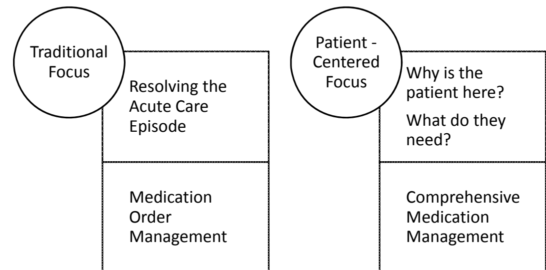
Call to Action: Patient-Centered Model for Pharmacy Practice



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Call to Action: Patient-Centered Model for Pharmacy Practice

- Isn't the need for medication reconciliation an unintended consequence of acute care medication "micro-management" creating MED WRECK
- Think of each admission as an opportunity to conduct a point of care evaluation, much like measuring blood glucose or INR to determine if drug therapy changes are needed.
- Shouldn't our goal be to resolve both acute drug-related problems associated with the admission and prepare the patient to safely use medications when they leave?

Disruptive Re-engineered Patient-Centered Model

- Patient brings in their medications from home for evaluation of the regimen by the pharmacist
- Medications are dispensed for the acute conditions
- Throughout the admission, pharmacists evaluate the entire medication regimen in collaboration with the team addressing both acute and chronic medication needs
- Unnecessary medications are discontinued and the pharmacist also focuses on trying to reduce the overall number of doses the patient will need to take to improve adherence

Disruptive Re-engineered Patient-Centered Model

- Patients are educated using teach-back method. Based on the patient's medication literacy, education may be required more than one time for some patients
- Patients who are competent self-administer medications under the supervision of the nurse
- Patients document their medications on a **patient-centered medication administration record** which they can continue to use upon discharge

Polling Question?

Goals of a patient-centered model include

A. Evaluating whether patient need to be continued on all the medications they are on
B. Engaging the patient in understanding their medications
C. Reducing discrepancies and errors associated with medication reconciliation
D. All of the above

Implications of Patient-Centered Model

- Would this approach enable pharmacists to spend more time focusing on patient-centered medication needs and less time managing order transactions?
- Would patient care be improved by this transformation?
- Would these changes free up the other members of the team so that they can spend more time in patient care activities?
- Should we study this model to determine impact on pt outcomes as a first step towards the metamorphosis of health-system medication management? Are we ready for this sort of disruptive innovation?

Measuring Our Value

- "To ensure that we have the resources to provide the pharmacy care that our patients deserve, it is critical that we also develop the appropriate metrics and measurement tools." Paul Abramowitz, Whitney address [8]
- Multi-center studies should be conducted to identify and validate a core set of pharmacy-sensitive indicators associated with improved patient outcomes.

Acute Care Metrics

- # and severity of prescribing errors prevented and quality problems resolved/100 admissions
- # of ADEs in high-risk patients* /number of pharmacist hours/100 beds

* High risk inpatient populations: oncology, critical care and pediatrics

Transitions of Care Metrics

- # and potential severity of drug-related problems resolved during transitions of care and post-discharge/100 patients
- Adherence and readmissions rates 30, 90, and 180 days post-discharge in high risk patients* with pharmacist follow up vs high risk pts without pharmacist follow up
- Preventable medication-related readmissions/100 high risk patients

  * High risk pts: >10 medications, CHF, pneumonia, Acute Myocardial Infarction, anticoagulant, etc

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Today's Knowledge, Skills and Core Competencies

- Team-skills
- Leadership skills
- Population health
- Metric Competency: developing and measuring results
- Workflow management including the inter-relationships between people, processes and systems
- Specialty pharmaceuticals
- Cancer care

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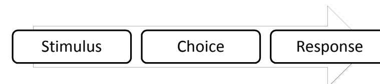
Bold Thinking and Leadership

- "Until one is committed, there is hesitancy, the chance to draw back, always ineffectiveness", on scaling Mt Everest
- Language of Leadership
  - **Yes, and** vs **Yes, but**
- "The most powerful model: choosing how we respond to the world" 9



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Polling Question?

Leadership is yes, and rather than yes, but

True

False

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Bold Imperatives

- Keep patients at the center of our priorities and actions
- Ensure the accuracy and safety of the patient's medication list in **the context of the whole patient** and in **collaboration with the healthcare team**,
- Recognize that ensuring safe use of medications is not limited to the brief time that patients spend within our walls
- **Measure what we do in terms that are relevant** to decision-makers-at the health-system, health professional and health policy levels.

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Bold Imperatives

- Remember that progress is the outcome of each interaction that we have.
- Each encounter presents us with **an opportunity to and a responsibility for** demonstrating our value to each stakeholder, especially to our patients.
- Bill Zellmer stated that an indicator of progress in transforming pharmacy will be public demand.1
- **I believe we will have achieved progress when our patients ask "Where is my pharmacist?"**

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Self-Assessment Questions:

1. The current focus on value demands increased pharmacy engagement in the following with the exception of:
   a. Team-based care
   b. Transitions of care
   c. Preventing readmissions
   d. Episode-based care

2. Risk-based models for reimbursements will require pharmacy staff to develop strategies to reduce expenses for outpatient infusion therapies.
   a. True
   b. False

3. Pharmacy competencies to ensure relevance include:
   a. Knowledge of population health
   b. Cancer care
   c. Team-skills
   d. Measuring results
   e. All of the above

4. Quantifying pharmacy's impact on reducing overuse of pharmaceuticals is a relevant metric in the current healthcare environment.
   a. True
   b. False

5. Patient-centered pharmacy practice would provide the following benefits except:
   a. Creation of an accurate medication list based on what the patient is taking
   b. Opportunity to educate the patient and family members about the medications they are taking and ensure safe self-administration
   c. Streamline the medication reconciliation process
   d. Support bar code medication administration

6. By taking responsibility for ensuring the accuracy of medication lists, pharmacists and technicians can reduce harm to patients and demonstrate value to stakeholders.
   a. True
   b. False

7. Post-discharge follow up of high risk patients can:
   a. Reduce readmissions
   b. Prevent adverse drug events
   c. Improve patient adherence and literacy
   d. All of the above

Key: 1. d., 2. a., 3. e., 4. a., 5. d., 6. a., 7. d.