Advancing Innovation in Pharmacy Practice: Working at the Top of Our Licenses

Michael A. Moné, BSPharm, JD, FAPhA
Alex Adams, Pharm.D., MPH
Desi Kotis, Pharm.D., FASHP

Michael Moné discloses that he is on the Board of ACPE
All conflicts resolved through peer review

Objectives: Pharmacist Participants

• Explain the value that pharmacists and pharmacy technicians bring to both the profession and the public when they work at the top of their licenses.
• Describe recent innovations in pharmacist care
• List current barriers in state pharmacy practice acts that prevent expanded pharmacist care
• Discuss the expanded use of pharmacy technicians in hospitals and health-systems
• Identify opportunities to expand pharmacist care

Objectives: Technician Participants

• Explain the value that pharmacists and pharmacy technicians bring to both the profession and the public when they work at the top of their licenses.
• Describe recent innovations in pharmacist care
• List current barriers in state pharmacy practice acts that prevent expanded pharmacist care
• Discuss the expanded use of pharmacy technicians in hospitals and health-systems
• Identify opportunities to expand pharmacist care

Expectation

• Section 465.002, Florida Statutes: Legislative findings; intent.—The Legislature finds that the practice of pharmacy is a learned profession.
• 225 ILCS 85/1: The Practice of the Profession of Pharmacy in the State of Illinois is declared a professional practice affecting the public health, safety and welfare...practice of pharmacy, merit and receive the confidence of the public....
• Learned Profession: three historical professions... law, theology, medicine

Value Proposition
Why do we have pharmacists?
Statutory Responsibilities

- Distill down the MUST obligations:
  - Accurate dispensing
    - What are the elements that are MUST obligations
  - Patient counseling
    - What are the elements that are MUST obligations
  - The ultimate question: Is the practice of the pharmacy a profession?
    - What professional standard is applied to pharmacist practice?

Statutory/Regulatory Obligations

- How to practice at the top of the license?
  - Reduce the statutory and regulatory obligations that are not "value add" to the public
  - Reduce the misperception within the profession of what is essential to meet the statutory/regulatory obligations to the public
  - Empower pharmacy technicians who have demonstrated knowledge, experience and competence with tasks that do not involve clinical decision-making, i.e., execution
  - Shift obligations to the permit that are not clinical, i.e., remove the statutory/regulatory obligations from the PC/PDM

Achievement of Value Proposition

- New Statutory/Regulatory Paradigm
  - For Pharmacists – the Negligence Standard
  - What would a reasonably prudent pharmacist do under similar conditions and circumstances? Prevailing community standard analysis
  - Has the pharmacist kept up with the changes in pharmacy practice and are they competent as evidenced by circumstantial markers...CE, peer-review, etc
  - For Technicians – the Performance Standard
  - Shifting task based activities to technicians the assessment becomes
    - Done or not done
    - How is it done: correctly or not

How do Technicians Facilitate the Practice

- Knowledge
  - General or Core
  - System Specific
- Experience
- Licensure
- Accountability

- This will require a fundamental shift in how we regulate and how pharmacies manage the workplace

Examples of the change in concept

- Go West – The Village People
  - (Go west) Life is peaceful there.
  - (Go west) Lots of open air.
  - (Go west) To begin life new.
  - (Go west) This is what we'll do.

- Oregon
  - During the 2015 Legislative Session, House Bill (HB) 2879 passed into law and was signed by Oregon Governor Kate Brown on July 6, 2015. The law is intended to develop standard procedures for the prescribing of hormonal contraceptive patches and oral contraceptives by an Oregon licensed pharmacist, providing timely access to care.

California

- As of August 10, 2016, pharmacists in California may now seek certification as an Advanced Practice Pharmacist (APP).
- The 2013 bill created the APP designation which is required for community pharmacists to obtain in order to qualify to participate in collaborative practice agreements. The 2013 bill also expanded all pharmacists’ scope of practice by creating statewide protocols under which pharmacists can “furnish” (a.k.a. prescribe) certain products including self-administered contraceptives, immunizations, travel medications, smoking cessation therapy and naloxone.
In Health Systems....

• Credentialing
  • Document and demonstrate that the healthcare professional being evaluated has attained the credentials and qualifications to provide the scope of care expected for patient care services in a particular setting.
• Privileging
  • Assure stakeholders that the healthcare professional being considered for certain privileges has the specific competencies and experience for specific services that the organization provides and/or supports.

  * http://www.pharmacycredentialing.org/Files/CCP_Special_Feature.pdf

Path Forward

• Create a dual path for the advancement of pharmacist professionally concomitantly with the advancement of opportunity for pharmacy technicians
  • Expanded duties for each...as pharmacists duties change the statute and regulations back fill the tasks removed and place within the scope of the pharmacy technician
• Implement changes to definitions and application of supervision
• Use technology to facilitate changes to pharmacist practice and abilities to supervise technician tasks

Pre-Test Questions

True or False:
1. Scope of practice is a legal construct that varies state to state.
2. The Idaho Board of Pharmacy has been authorized to create a “behind the counter” class of drugs provided certain conditions are met.
3. In Idaho, a trained and certified technician may administer any vaccine at the discretion of their supervising pharmacist.

Alex J. Adams

Scope of Practice

- A legal construct in which the activities that a health professional is permitted to engage in are defined by laws and regulations of the state
- Determined by the political process
- Geographical differences; applies to all professionals in class
- Static (aside from law changes)

Clinical Ability

- The true competence and ability of the health professional
- Determined by education, training, career experience, and practice environment
- National education standards; applies to individuals
- Dynamic; advances with new education, accrued experiences, new technology, etc.

Health Professional Regulation

The overarching goal of health professional regulation should be to harmonize clinical ability and scope of practice.
Precautionary Principle
• The belief that new practices or innovations should be curtailed or disallowed until their proponents can prove that they will not cause harm.
• Fear of worst-case scenarios
• "Mother May I?"

Permissionless Innovation
• The belief that experimentation with new technologies and practice models should generally be permitted by default; burden of proof on proving harm
• Allows bottom-up solutions
• Back-end enforcement

Markers of Progressive Pharmacy Practice

Idaho Autonomous Prescriptive Authority
• Immunizations
• Dietary fluoride supplements
• Opioid antagonists
• Epinephrine auto-injectors
• TB purified protein derivative
• Tobacco cessation medications

Idaho House Bill 191 (2017)
• Drugs, drug categories or devices that are specifically authorized in rules adopted by the Board . . . limited to conditions that:
  • Do not require a new diagnosis; or
  • Are minor and generally self-limiting; or
  • Have a CLIA-waived test that is used to guide diagnosis; or
  • Threaten the health and safety of the patient should the prescription not be immediately dispensed.

Technician Advanced Roles
• Broad support for expanding the role of appropriately-trained technicians
• Some pharmacists report concerns for their own liability
• Feel that as technician role expands, so should the technician’s own liability
• Pharmacists report variability in technician qualifications for expanded duties
• Critical to ensure assignment of functions made with the pharmacist
• Technicians reflect excitement about new roles and career opportunities
• Express frustration that they are "boxed out"
• Appreciate concept of a career ladder
### Delegated Technician Authority

<table>
<thead>
<tr>
<th>Medication Dispensing Support</th>
<th>Technical Support for Pharmacists Clinical Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Accept a verbal prescription</td>
<td>• Administer immunizations</td>
</tr>
<tr>
<td>• Clarify technical elements of prescription</td>
<td>• Administer CLIA–waived tests</td>
</tr>
<tr>
<td>• Transfer a prescription</td>
<td>• Perform basic physical assessment (e.g., pulse, temperature, blood pressure)</td>
</tr>
<tr>
<td>• Search PDMP</td>
<td>• Conduct medication reconciliation or preparatory work for MTM</td>
</tr>
<tr>
<td>• Perform final verification of medications that have previously undergone DUR by a pharmacist</td>
<td></td>
</tr>
</tbody>
</table>

### Post-Test Questions

**True or False:**

1. Scope of practice is a legal construct that varies state to state.  

2. The Idaho Board of Pharmacy has been authorized to create a "behind the counter" class of drugs provided certain conditions are met.  

3. In Idaho, a trained and certified technician may administer any vaccine at the discretion of their supervising pharmacist.

---

### Northwestern Medicine Vision

**OUR VISION:**

To be a premier integrated academic health system that will serve a broad community and bring the best in medicine – including breakthrough treatments and clinical trials enhanced through our affiliation with Northwestern University Feinberg School of Medicine – to a growing number of patients close to where they live and work.

---

### Northwestern Medicine Values

- **PATIENTS FIRST**  
  Putting patients first at all times

- **INTEGRITY**  
  Adhering to an uncompromising code of ethics that embraces honesty and integrity

- **EXCELLENCE**  
  Continuously striving to be the best

- **TEAMWORK**  
  Team success over personal success

---

### Three High Level Goals

- Advise, develop, and retain top talent in a culture that values innovation, excellence, and the highest levels of scholarship and provides the resources to support growth and success

- Become a premier integrated health care service where patients receive the highest quality, scientifically driven and personalized care
Advancements in Pharmacy Technician

Tech-Check-Tech

- Specialized Technician
  - Technician autonomy
  - Expanded role
  - Frees up pharmacist to focus on patient care
  - Safety and Quality Assurance measures in place

RFID Technology

- Technicians have COMPLETE ownership
- System designed to accurately check trays
  - Anesthesia trays
  - Emergency crash cart trays
- Uses RFID technology to ensure accuracy of medication

Decentralized Technician

- Technician ownership of entire floor
- Faster medication delivery
- Improved nursing and patient satisfaction

Patient Care Advocates

- Script data entry
- Benefits investigation
- Prior authorizations
- Financial assistance
  - Copay cards
  - Enrollment in manufacturer assistance programs
  - Finding funding using grants and other foundation programs
- Facilitating shipment of the drug
- Call center services
  - Refill management
  - Facilitate answering questions

Promoting the Profession of Pharmacy

- Co-Funded Faculty
- Train 420 PharmD. students from eight Colleges of Pharmacy

---

Drake University

Purdue University

UIC College of Pharmacy

Chicago • Rockford
Pharmacy Students

- Integrated Practice Model
- Medication History and Reconciliation
- Drug information and policy
- Drug Shortages
- Flu Vaccine campaign

Practice Advancement Initiative Process

- 85% of hospitals have pharmacists who have taken a leadership role in an ASP
- 60% of hospitals have collaborative practice agreements with pharmacists and other providers
- 52% of pharmacy departments evaluated ways to improve the organization’s effectiveness as an accountable care organization

- 67% of hospitals have processes to ensure medication-related continuity of care
- 68% of pharmacists in ambulatory care settings follow a standardized patient care process

Pharmacist Lead Education

- Bridge and Transition Team (BAT)
  - Interdisciplinary Team
  - Pharmacist role is to educate patients

  Patient admitted to hospital flagged as BAT patient
  BAT team is consulted
  Prior to discharge Pharmacist leads medication education

Pharmacist Lead Education (cont.)

- Pharmacist centric study conducted
  - March 2016: BAT Team initiated
  - July 2016: Cardiology Pharmacist Education Initiative
  - October 2016: Initiative expands to General Medicine Floors
  - February 2017: End of data analysis

  944 BAT patients flagged for pharmacist education

  30 Day Readmissions 30 Day Readmission Rate
  Patients NOT educated by a pharmacist (n=405) 79 19.5
  Patients educated by a pharmacist (n=539) 74 13.7
  p = 0.017

Emergency Department and Response

- Pharmacist Code Response
- GEDI-WISE Medication History
  - Includes Pharmacy Students
  - Identifies potential medication-related ED visits
- Pharmacist Driven Anticoagulation Counseling and Follow-Up
Organization Quality Metric

**Antimicrobial Stewardship**

<table>
<thead>
<tr>
<th>Metric</th>
<th>FY16</th>
<th>Target</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pos HIC c.diff tests (per month)</td>
<td>51</td>
<td>66</td>
<td>88</td>
<td>88</td>
<td>100</td>
<td>96</td>
</tr>
<tr>
<td>C. Diff SR (quarterly)</td>
<td>1.03</td>
<td>0.93</td>
<td>0.88</td>
<td>0.87</td>
<td>0.87</td>
<td>0.87</td>
</tr>
<tr>
<td>HD c.diff rate (1000 pt days)</td>
<td>0.70</td>
<td>0.66</td>
<td>0.54</td>
<td>0.53</td>
<td>0.53</td>
<td>0.53</td>
</tr>
<tr>
<td>Optimize Antimicrobial Therapy (TJC 6,7,8)</td>
<td>FY16</td>
<td>Target</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
<td>Q4</td>
</tr>
<tr>
<td>PO rate of PO utilization</td>
<td>52%</td>
<td>60%</td>
<td>59.1</td>
<td>69.9</td>
<td>73.2</td>
<td></td>
</tr>
<tr>
<td>Fluconazole rate of PO utilization</td>
<td>85%</td>
<td>87%</td>
<td>85.7</td>
<td>87.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Improve Antibiotic Education (TJC 6,7,8)</td>
<td>FY16</td>
<td>Target</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
<td>Q4</td>
</tr>
<tr>
<td>% appropriate CAP</td>
<td>87%</td>
<td>90%</td>
<td>90%</td>
<td>98%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>% appropriate UTI</td>
<td>80%</td>
<td>90%</td>
<td>93%</td>
<td>88%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Pharmacy Residency Program**

The Northwestern Pharmacy Department offers a traditional PGY1 program, a non-traditional PGY1 program, many PGY2 programs, and a fellowship in Infectious Disease.

- 10 traditional PGY1 residents
- 9 non-traditional PGY1 residents
- 1 Critical Care PGY1 resident
- 2Nephrology/Oncology PGY2 residents
- 2 Transplant PGY2 residents
- 1 Infectious Disease PA resident
- 1 Infectious Disease PGY2 resident
- 2 Infectious Care PGY2 residents
- 3 Infectious Disease Fellows

**Residency Growth**

- **Pharmacy Residency Program**
  - 2010-2011: 27 residents
  - 2011-2012: 30 residents
  - 2012-2013: 33 residents
  - 2013-2014: 31 residents
  - 2014-2015: 46 residents
  - 2015-2016: 49 residents
  - 2016-2017: 50 residents
  - 2017-2018: 49 residents

**Advancing Medical Science and Knowledge**

- **Publication, Presentation and Research Activity**
  - 2006: 22 presentations, 2 posters
  - 2007: 47 presentations, 10 posters
  - 2008: 53 presentations, 14 posters
  - 2009: 56 presentations, 14 posters
  - 2010: 75 presentations, 14 posters
  - 2011: 86 presentations, 14 posters
  - 2012: 86 presentations, 14 posters
  - 2013: 82 presentations, 14 posters
  - 2014: 85 presentations, 14 posters
  - 2015: 23 presentations, 14 posters
  - 2016: 21 presentations, 14 posters

**Changing Health Outcomes**

- **Ambulatory Care**
  - **Exceptional/Patient Experience**
    - Safety
    - Access
    - Value
    - Engagement
  - **Finance/Workforce**
    - Exceptional patient experience
    - Cultural transformation
    - Lean principles

**Note:** Presentations include presentations, posters, workshops, case studies, and panel discussions.
Questions?