Advancing Pharmaceutical Education and Practice through Entrustable Professional Activities (EPAs)

Kari L. Franson, PharmD, PhD
Associate Dean for Professional Education

Ralph J. Altiere, PhD FFIP
Dean
Learning Objectives

▪ Identity EPAs that expand pharmacist responsibility
  ▪ Prepare students & pharmacists to provide direct patient care
  ▪ Assume responsibility and accountability with measurable and improved health outcomes
  ▪ Gain acceptance of new pharmacist roles by society and the profession through use of EPAs
▪ Discuss the challenges inherent in introducing and coordinating the EPA development process
▪ Develop strategies that can be used to overcome them
“Pharmacists and pharmaceutical scientists accept responsibility for the development and sustainability of an adaptable and capable global workforce working in partnership for better healthcare through transformative and continuous education.”

2016 Nanjing Declaration

“Pharmacists and pharmaceutical scientists accept responsibility for the development and sustainability of an adaptable and capable global workforce working in partnership for better healthcare through transformative and continuous education.”
Pharmacist Workforce Development Goals

- PWDGs – designed to implement the Vision and Statements and to be achievable, relevant and useful, evidence-based, developmental and dynamic

Purpose “…. to support and develop high standards of education and training and to promote and protect the health and well being of civil society …. ”
We are from Colorado

Population of 5.6 million
The population is either metro or rural

Denver metro
2.8 million
Pharmacy environment in Colorado

- Number of registered pharmacists = 5270
  - 3280 work in metropolitan Denver
- Number of hospitals = 113
  - 17 have a bed count of > 300
  - 90 have a bed count < 90
- Pharmacies are throughout the state
Colorado pharmacist’s roles are expanding

- Providing immunizations
- Managing chronic disease through collaborative drug therapy management protocols
  - Diabetes, Hypertension, Dyslipidemia
- Prescribing medications based on state-wide protocols
  - Birth control, tobacco cessation, naloxone, etc.
Consider activities that expand pharmacist responsibility to achieve the global vision and PWDGs in your environment

» What types of tasks?

» Do they allow pharmacists to provide direct patient care?

» Are they based on country norms or stretch expectations?

» Is responsibility and accountability expected with measurable and improved health outcomes?
Aim

- Prepare pharmacists and pharmacy students to provide direct patient care
- Have them assume responsibility and accountability with measurable and improved health outcomes
Typical educational model

- **Knows**
- **Knowing how**
- **Shows how**
- **Does**

**Cognition**

- Classroom
- Classroom

**Behaviour**

- Practical experience in final year
- Simulation centers

How can EPAs help to achieve these goals?

- They are a means to translate competencies (personal descriptors) into clinical practice (work descriptors) and are executable in a specific time frame, observable and measurable to determine one’s ability to perform a defined clinical task.

- In so doing, they provide the learner and assessor with valuable feedback on progress towards ever higher levels of practice.
Entrustable Professional Activity (EPA)

- A unit of professional practice (task) that can be entrusted to a sufficiently competent learner (student or practitioner)
  - Independently executable within a time frame
  - Observable
  - Measurable in process and outcome
- EPAs are not an alternative for competencies, but a means to translate competencies into clinical practice
- EPAs provide a framework for developing and advancing professional practice

## Competencies versus EPAs

<table>
<thead>
<tr>
<th>Competencies</th>
<th>EPAs</th>
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<tbody>
<tr>
<td>Person descriptors</td>
<td>Work descriptors</td>
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<tr>
<td>Knowledge, Skills, Attitudes</td>
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<td>Content expertise</td>
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<td>Lead care giver or family meeting</td>
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**EPAs translate competencies into practice**
For most EPAs, multiple competencies are required

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EPAs 5 levels of assessment, responsibility and accountability (trust)

1. Presence but no permission to enact EPA (shadowing)
2. Practice EPA with direct (proactive) supervision (direct observation, guidance)
3. Practice EPA with indirect (reactive) supervision (preceptor available when needed)
4. Unsupervised practice allowed (distant oversight) (preceptor reviews cases with learner periodically)
5. May supervise junior learners

Develop new process to address needs (creating change)
Goal

- Gain acceptance of new pharmacist roles by both society and the profession through use of EPAs
Discussion – 15 min

- Recall the earlier identified practice expanding activities
- Write the activity as an EPA
- Check yourselves with the following criteria.
- Is it: A unit of professional practice (task) that can be entrusted to a sufficiently competent learner (student or practitioner)
  - Independently executable within a time frame
  - Observable
  - Measurable in process and outcome
Success with EPA implementation: immunizations

- Required workforce policy change (PWDG #13) to expand scope of practice
- No certified immunizers in community pharmacies, faculty received specialized training
- Students and pharmacists were trained via APhA certification to provide immunizations (didactic study & skills practice)
- Faculty hosted immunization health fairs to build students’ experience in shouldering responsibility for direct patient care
- Public learned to trust the Pharmacist as immunizer. Community pharmacies are now primary sites for immunizations
Learners moved up levels of supervision

1. Shadowing (collection of patient info.)
   » Communication skills
   » Knowledge of vaccine, individual’s contraindications, potential adverse side effects

2. Immunization with direct supervision (observation & guidance)
   » Proper injection techniques
   » Communication skills
   » Knowledge of vaccine, individual’s contraindications, potential adverse side effects

3. Immunization with indirect supervision (intervene if necessary)

4. Unsupervised practice allowed (distant oversight)

5. Senior students taught junior students the process (teaching new learners)

   Develop new screening process to minimize wait times (creating change)
   » Reflection skills
Education driving practice

- Patients treated at school-sponsored free flu-clinic events: 65 pts/year
- Patients treated at student’s pharmacy placement site: 38 pts/year

Franson KL, Nuffer WA, Gilliam EH, Turner CJ
Presented at American Association of Colleges of Pharmacy Annual Meeting, Grapevine, TX 2014
Impact of Pharmacists immunization authority on seasonal influenza immunization rates across states

Odd ratios and Cis are shown for estimates of the effect of a person’s state allowing pharmacists to administer “flu shots” on the likelihood that a person will receive a flu shot.

Six Domains with 15 sub-domains and example supporting tasks (EPAs)

- Patient Care Provider
- Interprofessional Team Member
- Population Health Promoter
- Information Master
- Practice Manager
- Self-Developer

Collect information to identify a patient’s medication-related problems and health-related needs

**Example Supporting Tasks:**

- Collect a medical history from a patient or caregiver.
- Collect a *medication history* from a patient or caregiver.
- Discuss a patient’s experience with medication.
- Determine a patient’s *medication adherence*.
- Use health records to determine a patient’s health-related needs relevant to setting of care and the purpose of the encounter.
Establish patient-centered goals and create a care plan for a patient in collaboration with the patient, caregiver(s), and other health professionals that is evidence-based and cost-effective.

Example Supporting Tasks:

- Follow an evidence-based disease management protocol.
- Develop a treatment plan with a patient.
- Manage drug interactions.
- Select monitoring parameters to determine the therapeutic and adverse effects related to the treatment plan.
- Determine the appropriate time interval(s) to collect monitoring data.
- Create a patient-specific education plan.
Success with EPA implementation: Chronic Disease Management

Clinical pharmacists have been part of Salud health care team for years, and provide wide range of services

» Conduct patient interviews, medical and medication histories
» Conduct point-of-care testing (glucose, HBA1c, lipids, BP)
» Provide CDTM (comprehensive/collaborative drug therapy management) with NPs, MDs
» Educate patient on condition and plan for health care / safety
» Develop plan for monitoring patient, home monitoring equipment and educating patient in use of this equipment
» Develop schedule and specific procedures for check-ins with home health care and visits to the clinic with transportation
## EPA for CU Ambulatory Clinical rotation

<table>
<thead>
<tr>
<th>ABO 3: Design, implement, evaluate and adjust a patient-centered pharmacy care plan</th>
<th>Beyond Entry-Level Performance</th>
<th>Entry-Level Performance</th>
<th>Entry-Level Performance with limitations (Improvement Needed)</th>
<th>Beginning Performance (Significant Improvement Needed)</th>
<th>Not Ready for Advancement (Failure to demonstrate skill)</th>
<th>Not Applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Critically evaluate and select treatment options using sound scientific principles, guidelines, and evidence</td>
<td>5.0</td>
<td>4.0</td>
<td>3.0</td>
<td>2.0</td>
<td>1.0</td>
<td>0</td>
</tr>
<tr>
<td>Consider patient-specific characteristics, including health literacy, cultural diversity, clinical data, and behavioral psychosocial issues, when determining appropriate medication and non-medication therapies</td>
<td>5.0</td>
<td>4.0</td>
<td>3.0</td>
<td>2.0</td>
<td>1.0</td>
<td>0</td>
</tr>
<tr>
<td>Select appropriate medication and non-medication therapy</td>
<td>5.0</td>
<td>4.0</td>
<td>3.0</td>
<td>2.0</td>
<td>1.0</td>
<td>0</td>
</tr>
<tr>
<td>Develop a monitoring plan</td>
<td>5.0</td>
<td>4.0</td>
<td>3.0</td>
<td>2.0</td>
<td>1.0</td>
<td>0</td>
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Development of an innovative sustainable, value-based clinical pharmacy program in a Federally Qualified Health Center

Baseline A1C
- A1C <9%: 44%
- A1C ≥9%: 56%

One year follow up A1C of PharmD Patients
- A1C <9%: 69%
- A1C ≥9%: 31%

Baseline BP
- BP ≤140/90: 35%
- BP >140/90: 65%

One year follow up Blood Pressure of PharmD Patients
- BP ≤140/90: 60%
- BP >140/90: 40%

Baseline LDL
- LDL ≤100: 45%
- LDL >100: 55%

One year follow up LDL-C of PharmD Patients
- LDL ≤100: 72%
- LDL >100: 28%
Discussion – 45 min

- Considering the earlier identified EPAs (or new ones!), what is the process to develop new clinical abilities in students and practitioners?

- How can EPAs be used to develop professionalism, empathy and other “soft skills” in addition to professional “tasks”?

- What challenges are inherent in delivering this education to students, to practitioners? What strategies can you use to overcome them?

- Are there disadvantages to using EPAs to drive pharmacy practice?
Dutch training program for community pharmacists

There are 40 EPAs in total, a description of which is given for each task area.

The description is followed by the applicable assessment instruments and the frequency of assessment each year.

<table>
<thead>
<tr>
<th></th>
<th>Patient counselling when dispensing a medicine for the first time</th>
<th>Cover all ‘major diseases’: diabetes, asthma/ COPD, cardiovascular disease, psychiatric disorders (particularly depression), rheumatic diseases and cancer. This includes providing technical instructions, e.g. for inhalation devices, blood glucose meters, etc. Keep the patient’s social, psychological and cultural background in mind, e.g. in respect of a psychiatric patient, elderly dementia patients, etc. NB: Language barrier/communication problems, Ramadan, a child suffering from a chronic disease, disabilities, the desire to have children, pregnancy and breast feeding (see knowledge and skills checklist in Appendix A).</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Patient counselling when dispensing a medicine on a second or subsequent occasion</td>
<td>In any event dispense the medicine a second time. Cover all ‘major diseases’. See also the explanation under EPA 1 and the knowledge and skills checklist in Appendix A.</td>
</tr>
<tr>
<td>3</td>
<td>Counselling a palliative care patient</td>
<td>A prescription for an opiate may signify the time to begin counselling. Termination of Life on request may sometimes signify the termination of care for a palliative care patient. Although this is not considered as palliative care, this particular aspect of care has been included here.</td>
</tr>
</tbody>
</table>
| 4 | Counselling a patient or the patient’s carer in using care and/or medical aids | • Incontinence products  
• Surgical dressings  
• Liquid foods  
• Injection systems, drips, cartridges (see knowledge and skills checklist in Appendix A). |

<table>
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<tr>
<th>Form of assessment</th>
<th>Subject</th>
<th>Frequency</th>
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| Short Practical Assessment | EPA 1: Patient counselling when dispensing a medicine for the first time (with different aspects, where possible). | 1x in first year  
1x in second year |
| Short Practical Assessment | EPA 2: Patient counselling when dispensing a medicine a second time (with different aspects, where possible). | 1x in first year  
1x in second year |
| Short Practical Assessment | EPA 4: Counselling a patient or the patient’s carer in using care and/or medical aids. | 1x in first year  
1x in second year |
| Assessment of patient record | EPA 1: Copy of an anonymised EPR or a completed protocol concerning dispensing medicine for the first time to patients suffering from diseases, in accordance with the knowledge and skills checklist in Appendix A. | 7x in first year  
7x in second year |
# Levels of Entrustability

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<th>Level</th>
<th>Description</th>
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<tbody>
<tr>
<td>1. Observation</td>
<td>1. Observation but no execution, even with direct supervision</td>
</tr>
<tr>
<td>2. Direct Supervision</td>
<td>2. Execution with direct, proactive supervision</td>
</tr>
<tr>
<td>3. Reactive Supervision</td>
<td>3. Execution with reactive supervision, i.e., on request and quickly available</td>
</tr>
<tr>
<td>4. Intermittent Supervision</td>
<td>4. Supervision at a distance and/or post hoc</td>
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<tr>
<td>5. General Direction</td>
<td>5. Supervision provided by the trainee to more junior colleagues - Independently decide tasks or develop new processes to address needs</td>
</tr>
</tbody>
</table>

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Creates professionals ready to be agents of change

Reflection

Teaches what is possible

What is already known and can be done

Knows how

Show what can be done

Does
Creating masters takes time!

Gladwell states most experts accrue 10,000 hours of practice before they develop their talent…
Join us in beautiful Colorado for the 2nd Pharmacy SNOW (Strategies for New Opportunities Worldwide) Symposium. The symposium brings pharmacy practitioners and educators together to share best practices for novel pharmacy approaches to address global health disparities.

2019 SNOW Symposium Themes:
1. Education driving patient care
2. Interprofessional practice to improve quality of patient care
3. Practice to improve patient wellness

You are invited to participate in roundtable discussions, short oral presentations, poster presentations, and receptions that will provide numerous opportunities to network, collaborate and elevate international pharmacy practice. International experts will set the stage.

www.ucdenver.edu/pharmacy/SNOW

Abstract submissions to jodie.malhotra@ucdenver.edu