A Curriculum Committee Toolkit for Addressing the 2013 CAPE Outcomes

Moderated by
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University of South Florida College of Pharmacy
Presenter I

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Sullivan University College of Pharmacy
Objectives

• Discuss different methods that Curriculum Committees can use to incorporate the 2013 revised CAPE into their curriculums
• Describe the structure and process for curriculum integration
• Describe methods to provide progression of content and enhance retention of knowledge and concepts.
• Describe resources to aid curriculum committee members and faculty to develop experiences that prepare future pharmacists as collaborators in health care environment.
Introduction

• 2013 Revised Center for the Advancement of Pharmacy Education (2013 rCAPE)
  – 4th version
  – Created to guide colleges/schools of pharmacy curriculum planning, delivery, and assessment

• 4 Domains
  – Foundation knowledge
  – Essentials for practicing pharmacy and delivery patient care
  – Approaches to practice and care
  – Ability to develop professional and personal competencies
Traditional Curriculum Committee (CC) Responsibilities

- Ensuring the curriculum aligns with programmatic outcomes
- Ensuring changes to accreditation and national guidelines are incorporated within programmatic outcomes and the curriculum
- 2008 Carter et. al. CC Chairs survey regarding: committee structure, function, and charges
  - Comparison with 1994 data (original survey)
  - 85/100 pharmacy program participated
  - 70% said CC had primary oversight for the following
    - Systematic course reviews: 65%
    - Curricular revisions: 83%
    - Assessment of curricular competencies: 45%
    - Developing curricular competencies: 38%
2013 rCAPE CC Considerations

• Determine incorporation
  – Adopt in full
  – Incorporate in part
  – Expand upon or edit

• Determine impact on existing curriculum
  – Ensure curriculum is/remains integrated (intended, enacted, learned) and aligned
  – Ensure depth and breadth gradually increases in concert with student progression
Presenter II

Lisa S. Smith, PharmD, BCPS
Assistant Dean of Faculty Affairs
Wingate University School of Pharmacy
Curriculum Integration

- Integration necessary to optimally address the 2013 rCAPE
- Integration includes both structure and a flexible process
Curriculum Integration Structures

• Horizontal
  – Multidisciplinary
  – Interdisciplinary
  – Transdisciplinary
• Vertical
• Spiral
Horizontal Integration
Multidisciplinary

- Each discipline focused on a common theme in separate courses
Horizontal Integration
Interdisciplinary

- Disciplines teach together on a shared understanding of the topic
Horizontal Integration
Transdisciplinary

- Integration is so transparent there is no distinction between disciplines
Vertical Integration

- Includes the progression of curriculum over time and ensures theory and practice are combined in the learning process.
Spiral Integration

- Incorporates both horizontal and vertical with increasing complexity at different stages in the curriculum
Curriculum Integration Process

- Most common in pharmacy curricula include
  - Temporal Coordination
  - Correlation
  - Complementary Programs
  - Multidisciplinary
  - Transdisciplinary

- Steps should be aligned with pedagogic and assessment methods
Curriculum Integration Considerations

- **Programmatic**
  - Mission, vision, goals, programmatic outcomes
  - 2013 rCAPE
  - ACPE Accreditation Standards
  - Available resources

- **Curricular**
  - Develop models that provide purposeful, progressively challenging, integrative learning across curriculum

- **Pedagogical**
  - Examples: PBL, TBL, Case studies, Skills Lab, Capstone Courses

- **Assessment**
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Table 1 Useful References for Integrative Curriculum Development may be accessed at http://www.aacp.org/resources/education/cape/Documents/CurriculumSIGCAPEPaperFinalNov2014.pdf
Presenter III

Jennifer A Henriksen, PharmD
Laboratory Experience Coordinator
Associate Professor of Pharmacy Practice
Director, Post Baccalaureate Pre-Health Professions Program
Manchester University College of Pharmacy
Progression and Retention

• Progression
  – Depth and breadth of concepts
  – Rigor

• Measuring retention of knowledge as students progress through the curriculum
Miller’s pyramid

- Does (Action)
- Shows How (Performance)
- Knows How (Competence)
- Knows (Knowledge)
Domain 1 – Foundational Knowledge

• First Professional year
  – Knows
  – Knows How

• Foundational courses

• Courses that enable integration
  – Demonstrate retention

• Capstone assessments
Domain 2 – Essentials for Practice and Care

• Didactic Course work
  – Knows
  – Knows How
  – Shows How

• Experiential
  – Does
Domain 2: Curricular Activities

• Case based active learning
• Examinations
• Standardized Patient encounters
• Capstone assessments
• Experiential Education
Domain 3 – Approach to Practice and Care

• Didactic Course work
  – Knows
  – Knows How
  – Shows How

• Experiential
  – Does
Domain 3: Curricular Activities

• Problem Based Learning
• Cultural Competency activities
• Standardized Patient encounters
• Interprofessional Education
• Capstone assessments
Domain 4 – Personal and Professional Development

• Didactic Course work
  – Knows
  – Knows How
  – Shows How
  – Does

• Experiential
  – Does
Domain 4: Curricular Activities

- Self-assessment tools
- Self-reflection
- Team/group activities
  - Problem Based Learning
- Deliberate Integration of Student Leadership Development in Doctor of Pharmacy Programs - Leadership SIG CAPE paper
- Pharmacy Professionalism Toolkit for Students and Faculty - APhA/AACP
Presenter IV

Christine K O’Neil, PharmD, BCPS, CGP, FCCP
Professor, Division of Clinical, Social, and Administrative Sciences
Director of Curriculum Development and Interprofessional Education
Duquesne University Mylan School of Pharmacy
Creating Interprofessional Education Experiences

• Interprofessional education (IPE):

“When students from two or more professions learn about, from and with each other to enable effective collaboration and improve health outcomes. “

Evidence for IPE

- IPE is well-received and is a conduit for enabling knowledge and skills necessary for collaborative work
- IPE is less able to positively influence attitudes and perceptions towards others
- Evidence of IPE effectiveness is limited
- Evidence does suggest that an interprofessional approach improves quality and decreases cost of care.


Interprofessional Education Collaborative (IPEC)

• Expert panel consisting of representatives from:
  – Association of Colleges of Nursing, American Association of Colleges of Osteopathic Medicine, American Association of Colleges of Pharmacy, American Dental Education Association, Association of American Medical Colleges, and Association of Schools of Public Health.

• Competencies are general and flexible enough to be used by any profession:
  – Domain 1 – Value and Ethics for Interprofessional Practice
  – Domain 2 – Roles and Responsibilities
  – Domain 3 – Interprofessional Communication
  – Domain 4 – Teams and Teamwork

• IPE learning experiences should be linked to one or more of these competencies.

Challenges to Implementing IPE

- Structure of programs
  - Scheduling
  - Rigid curricula
- Availability of partnerships
  - Attitudes; turf battles
- Availability of resources
- If these exist:
  - Start with small pilot initiatives and continue to grow the program, rather than wait for all resources to be in place.
Implementing IPE: Faculty Development

• Faculty development is a critical first step in the implementation of any IPE initiative.
• The IPEC competencies recommended for student learning may also be used to design faculty development programs.
• Look for faculty champions:
  – Commitment to IPE
  – Understanding of the roles and responsibilities of IPE partners
  – Positive role modeling
  – Group dynamics
  – Expert facilitation
  – Value diversity
  – Skills in active learning techniques

Implementing IPE: Models

• IPE is possible with any model of pharmacy education:
  – Fully integrated academic health center
  – Partially co-located program with pharmacy and other professions under a common university ownership
  – Partially co-located with pharmacy and other professions under different university components
  – Pharmacy with other health professions but no medical school
  – Pharmacy with no other health education programs on campus

• More readily implemented in programs that have co-existing health professions schools

• Partnerships with programs outside the school and creative teaching strategies with technology may facilitate IPE experiences in distant partnerships.
Implementing IPE: Learning Locations

- Academic health clinics and hospitals
- Off-site clinics
- Campus simulations centers
- Campus student health centers
- Clinics and programs in local school systems, community health centers
- Community faith-based centers
- Individual private or group practices
- Mental health facilities
- Hospice programs
- Long term care facilities
- Traditional classrooms or laboratory settings.
Curricular Considerations

• Ideally, IPE experiences should be present in didactic, experiential, and co-curricular formats.
• Present in each year of the professional curriculum to facilitate development of pharmacist as collaborators.
• Incorporation of early IPE exposure in pre-professional programs is also an opportunity.
Curricular Considerations

• Conduct an inventory to provide a basis for identifying common curricular IPE themes and courses to begin building the IPE program.

Curricular Themes

- Communication skills
- Health care ethics
- Treatment adherence
- Public health
- Emergency preparedness
- Medication errors; patient safety topics
- Care of the patient with chronic illnesses or those in special populations.


Curricular Formats for IPE Experiences

• Live
  – Simulations
  – Real patient-care settings
• Virtual
  – Asynchronous
  – Synchronous

➢ AACP-Professions Quest
  – Gaming learning platform – MIMYCX
  – https://www.youtube.com/watch?feature=player_embe dded&v=mFnVu0tSrrU
Characteristic of IPE Courses/Experiences

- Planning and teaching by an interprofessional mix of faculty
- A minimum of one learning objective (IPEC Competencies) indicating that students, upon completion of the course, will demonstrate an increase in level of interprofessional competence
- Content relating to interprofessional competence is included and preferably threaded, throughout the course
- At least one assignment that necessitates interprofessional group work. Experiential courses may be designated as interprofessional.
- Student participants in the course/experience represent at least two health professions
  - Matching students with equivalent levels of education for IPE experiences
  - IPE experience should be reflective of real practice connections between disciplines
  - IPE learning experiences should be optimized to achieve IPE outcomes for each of the programs involved and do not necessarily need to involve every health profession
- Includes an assessment of growth in interprofessional competence.
Assessment of IPE

• Reflection of what the student has gained
• Other assessment tools:
  – Readiness for Interprofessional Learning Scale (RIPLS)
  – Interdisciplinary Education Perception Scale (IEPS)
  – Attitudes Toward Health Care Teams Scale
    • Heinemann GD et al. Eval Health Prof. 1999;22:123-42

• Programmatic Outcomes
  – 42-item questionnaire developed using the IPEC competencies

Presenter IV

Amy H Schwartz, PharmD, BCPS
Associate Dean for Academic Affairs
University of South Florida College of Pharmacy
Mechanisms to Incorporate 2013 rCAPE

- Example Method 1: Academic Review Model

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<thead>
<tr>
<th>Step</th>
<th>Course of Action</th>
<th>Desired Outcome(s)</th>
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<tbody>
<tr>
<td>Step 1: Plan</td>
<td>Decide what questions are to be answered about the curriculum.</td>
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<tr>
<td>Step 2: Create the Process</td>
<td>Decide what data will be gathered to answer questions in Step 1 and define the metrics for measurement and the code for the map.</td>
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### Steps for Re-evaluating the Curriculum for Insertion of CAPE

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<tr>
<th>Step</th>
<th>Course of Action</th>
<th>Desired Outcome(s)</th>
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<tr>
<td>Step 3: Gather Data</td>
<td>Plan the process for gathering data and clearly describe the data collection timeline.</td>
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<tr>
<td>Step 4: Analysis</td>
<td>Decide how to use the coded and/or other mapping data to answer the pertinent curriculum questions from Step 1.</td>
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<tr>
<td>Step 5: Implement Enhancements</td>
<td>Create an implementation plan to address the enhancements determined in Step 4.</td>
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Steps for Re-evaluating the Curriculum for Insertion of CAPE

• Method 2: Policy Analysis Method

<table>
<thead>
<tr>
<th>Consideration / Perspective</th>
<th>Questions</th>
<th>Analysis</th>
<th>Plan</th>
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<tbody>
<tr>
<td>A. Conceptual</td>
<td>What are the core concepts under discussion? How are they defined?</td>
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<td>What are their measurable outcomes?</td>
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<td>B. Normative</td>
<td>What “ought to be” true in regard to the curricular change? How are the current actions of faculty and/or students in the college different from what “ought to be”?</td>
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<tr>
<td>C. Theoretical</td>
<td>Within what theoretical framework(s) does the curriculum fit? How would different parties within the program define the curriculum in theoretical terms?</td>
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### Steps for Re-evaluating the Curriculum for Insertion of CAPE

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<th>Plan</th>
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<tr>
<td>D. Empirical</td>
<td>What literature exists which could prove helpful in illuminating the issues?</td>
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<td>E. Economic</td>
<td>What impact would the adoption of the curricular change have on fiscal resources</td>
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<tr>
<td>F. Political</td>
<td>What impact(s) would the adoption of the curricular change have on internal and external constituents?</td>
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<tr>
<td>G. Cultural</td>
<td>How are different organizational, racial, gender, and/or professional cultures within the program affected by the curricular change?</td>
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<td>H. Ideological</td>
<td>Are there ideological and informational aspects associated with the curricular changes?</td>
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Steps for Re-evaluating the Curriculum for Insertion of CAPE

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<tr>
<td>I. Historical</td>
<td>Does the proposed curricular change have a history within the institution?</td>
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<td>J. Assumptive</td>
<td>Are there key assumptions being made by the parties involved in or affected by the curricular change?</td>
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<td>K. Legal</td>
<td>What legalities or legal precedents may be involved in or have an effect on the proposed curriculum?</td>
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<td>L. Logical</td>
<td>Are the curricular changes logically sound?</td>
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## Curriculum Mapping Examples

- **Traditional Template**

<table>
<thead>
<tr>
<th>Objective</th>
<th>2013 Revised Cape Domain</th>
<th>Desired Outcome(s)</th>
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- **CAPE-Specific Template**

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<tr>
<th>Year</th>
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<td>P1, P2, P3, P4</td>
<td>Number or Name</td>
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<td>Personal and Professional Development</td>
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Questions
Thank you!