Ability-based Outcomes of the Professional Curriculum  
(Approved by the College of Pharmacy Curriculum Committee 2011)

Purpose: To define a minimal set of clear, concise, program-level ability-based outcomes for the professional curriculum of the University of Utah College of Pharmacy. These ability-based outcomes support the goals of the professional curriculum and the specific outcomes approved by the faculty in 2010.

Background: Ability-based outcomes describe what the students will be able to accomplish if they successfully complete the professional curriculum. Ability-based outcomes define what the graduates will be able to accomplish as a result of obtaining the knowledge, skills and attitudes during the professional curriculum, but don’t necessarily define the specific knowledge, skills and attitudes that enable student to achieve the outcomes.

The ability-based outcome statements are intentionally broad and are written at the programmatic level. They reflect the abilities of students after completion of the entire course of study and not an individual course, semester or year. Ongoing curricular revisions should be directed towards a curriculum that helps students attain knowledge, skills and attitudes necessary to successfully meet the ability-based outcomes.

Throughout the curriculum, students will achieve varying levels of competency for the programmatic ability-based outcomes. By graduation, it is expected that students will be able to perform all of the ability-based outcomes to meet the minimum requirements to practice.

These ability-based outcomes should help guide future curricular revision and assist in the mapping of the college curriculum for assessment and ongoing quality assurance. As a first step in curricular mapping, it is recommended that course syllabi include a list of the abilities-based outcomes that are most relevant to that course.

Below are the College of Pharmacy PharmD professional outcome statements. Under each professional outcome statement are three to five ability-based outcomes.

Graduates of the University of Utah Doctor of Pharmacy Program will be able to optimize patient-centered and population-based care in a variety of practice settings. Graduates shall be able to:

Apply fundamental scientific, analytic and problem-solving skills to all areas of pharmacy practice

- Use appropriate scientific terminology to convey concepts of pathophysiology, medicinal chemistry, pharmaceutics, pharmacology, and pharmacokinetics.
- Describe the pathophysiology of human disease at the molecular, cellular, organ system, and whole organism levels.
- Describe the importance of discovery and the scientific foundations of health care and apply that understanding to the practice of evidence-based care.
- Based on differences in chemistry, physical properties, pharmacology, pharmacokinetics, and pharmacogenomics, recommend changes in therapeutic regimens that minimize adverse drug interactions, reduce side effects, increase compliance, and improve
therapeutic outcomes.
  - Use information about the chemistry, physical properties, pharmacology, and pharmacokinetics of therapeutic agents in order to design and implement care plans that are patient-specific and evidence-based.

Work collaboratively on healthcare teams
  - Exhibit knowledge of and confidence with the pharmacist's role in health care systems and the provision of longitudinal care.
  - Cooperate, collaborate, communicate, and integrate care on interprofessional and intraprofessional teams to ensure that care is continuous, reliable, and patient-centered.
  - Discuss and remain open to differences of opinion and defend rational opinions that differ from those of other healthcare professionals.

Base patient care/practice decisions on sound science and best evidence
  - Display a fundamental knowledge of the basic pharmaceutical sciences.
  - Demonstrate the self-awareness and motivation to remain competent and knowledgeable of advances in pharmaceutical sciences as it impacts patient care.
  - Fully utilize evidence-based science and information technology to optimize patient care.

Apply medication safety and quality-improvement principles to pharmacy practice
  - Demonstrate the ability to develop and implement evidence-based programs and guidelines to improve medication safety and quality of care.
  - Accurately select, prepare, and dispense medications in a manner that promotes safe and effective use.
  - Predict, identify, evaluate, report, and recommend actions to minimize adverse drug events.

Manage medication-use systems
  - Apply basic science knowledge and evidence-based principles to achieve the goal of safe, effective, appropriate and efficient provision of drug therapy to patients.
  - Understand the major processes in medication-use systems including: selecting and procuring; storing; prescribing; transcribing and verifying/reviewing; preparing and dispensing; administering, educating and monitoring.
  - Utilize patient and population data and quality assurance strategies to optimize patient outcomes.
  - Apply key business principles, including continuous quality improvement, to the management of pharmacy services, personnel, and obtaining compensation.
Communicate effectively in both verbal and written formats
- Establish rapport with patients, families, and caregivers, as well as members of the healthcare team.
- Speak in a respectful, non-judgmental manner using compassion and empathy.
- Communicate clearly, accurately, concisely, and in language appropriate to the situation and audience using effective verbal, nonverbal, and listening skills.
- Demonstrate the ability to write using complete and grammatically correct sentences and in a manner that is clear, concise, and appropriate to the audience.

Promote public health and wellness
- Establish and/or participate in programs that promote wellness and preventative health practices.
- Promote awareness of healthy behaviors and disease prevention strategies.
- Recognize and address healthcare disparities.

Practice in an ethical, culturally aware and professional manner
- Demonstrate honesty, integrity, and accountability in all situations.
- Recognize and understand diversity.
- Practice in a culturally sensitive manner.
- Demonstrate interpersonal communicative skills that are sensitive to the values, socioeconomic status, and abilities of all individuals.

Demonstrate a commitment to continuous professional development and leadership
- Demonstrate continuous professional competency through ongoing self-assessment, self-directed learning, and self-reflection.
- Advance oneself and the profession through leadership, service activities, and participation in professional organizations.
- Demonstrate a commitment to caring for and advocating for all patients, including the underserved and/or those populations disproportionately affected by disease.

Optimize patient-centered and population based care in a variety of practice settings
- Obtain, interpret and evaluate patient information to determine the presence of a disease or medical condition, and assess the need for treatment and/or referral.
- Anticipate patients' needs to participate in the creation of individualized disease management and/or prevention plans that include patient self-management and behavior change.
- Analyze, assess and optimize self-care and medication management plans.
- Apply population specific data, quality assurance strategies, and research processes to identify and resolve public health problems and influence public health policy.