



Synchronizing Basic and Clinical Science Education at the Wegmans School of Pharmacy

Angela Nagel, Amy Parkhill, Jill Lavigne, Lisa Phillips, Judianne Sligh, Asim Abu-Baker, Anthony Corigliano, Brooke Lowry, Andrea Traina, Christine Birnie, Marvin Pankaskie.



Wegmans School of Pharmacy, St. John Fisher College, Rochester, NY 14618

Table 1: Examples of Longitudinal Topics Across the Curriculum

	P1	P2		P3	
	Spring	Fall	Spring	Fall	Spring
Psychiatry	Systems Pharmacology 2	Pathophysiology & Therapeutics 1			
Cardiovascular Disease		Systems Pharmacology 3	Pathophysiology & Therapeutics 2	Concepts in Pharmacy Practice	
Diabetes		Systems Pharmacology 3	Pathophysiology & Therapeutics 2	Concepts in Pharmacy Practice	
Asthma/Chronic Obstructive Pulmonary Disease (COPD)			Systems Pharmacology 4	Pathophysiology & Therapeutics 3	Concepts in Pharmacy Practice
Pain			Systems Pharmacology 3	Pathophysiology & Therapeutics 3	Self-Care and Natural Products
Infectious Disease				Systems Pharmacology 5	Pathophysiology & Therapeutics 4 Self-Care and Natural Products
Quality Improvement		Intermediate Pharmacy Practice Experience	Population Based Healthcare Topics in Medication Safety (Elective)		Concepts in Pharmacy Practice

Introduction

Retention of learned material is enhanced when it is reinforced over time in different contexts. To enhance retention of learned material and provide opportunities for remediation between semester breaks, the Wegmans School of Pharmacy has used continuous quality improvement to adapt topic sequencing across Science and Practice courses. The curriculum has been completely re-sequenced once since the founding of the WSoP in 2005. Based on assessment data, the curriculum will be adjusted as necessary using a CQI approach.

Any weaknesses in student learning identified by summative assessments are remediated during the breaks between semesters. This application of continuous quality improvement to the development, assessment and reinforcement of study learning and programmatic outcomes is consistent with Accreditation Council of Pharmacy Education Guideline 15 (2011).



Methods:

Using a continuous quality improvement (CQI) approach, the Chair of the Curriculum Committee led focus groups of faculty and students in a review of the curriculum in the summers of 2008-2009. Based on descriptive data collected during these summer reviews and from course evaluations, we re-sequenced science and practice courses across the curriculum beginning in 2010. Changes were made based on data from multiple sources, including a review of syllabi, student course evaluations, student focus groups and faculty visits to each others' classrooms. Each school year adjustments were made to the timing of course modules such that the entire curriculum was re-sequenced beginning with the class of 2013.

Consistent with a CQI approach, we have hired an Assistant Dean of Assessment, who beginning in 2011 will conduct outcomes-based reviews of the curriculum and recommend changes on an on-going basis as necessary.

Results:

Organ systems are typically taught first in basic science courses followed the next semester by clinical instruction (Table 1). For example, endocrine systems are taught in Systems Pharmacology at the same time as endocrine drugs are taught in Pathophysiology and Therapeutics during the P3 year.

Conclusions:

This continuous quality improvement method is on-going. We have acted by hiring a new Assistant Dean of Assessment. Plans include encouraging faculty to attend and lecture in courses outside their discipline. We are piloting (i.e. doing) the integration of Population science didactic coursework with IPPE I, among several examples.

References:

Accreditation Council for Pharmacy Education. (2011) Accreditation Standards and Guidelines. Guideline 15.0 Preamble. Last accessed July 5, 2011 at: www.acpe-accredit.org/standards.default.asp.