Non-traditional Competency-based Pharmacy Rotations Using Off-site Electronic Hospital Records of Anonymous Patients

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Introduction

Schools and colleges of pharmacy are facing a shortage of high quality Advanced Pharmacy Practice Experience (APPE) teaching sites for students in their final year of the Doctor of Pharmacy curriculum. Contributing to this shortage is increasing enrolments in pharmacy schools, an increase in the number of new pharmacy programs, and other economic factors within the healthcare system. This places pharmacy programs in the situation of having to accept less than optimal experiential sites, that in some cases do little more than provide an inexpensive labor force, to meet the new 36-week APPE rotations that are required by the Accreditation Council for Pharmacy Education (ACPE).

There is an urgent need to explore possible alternatives to traditional on-site APPE clinical rotations that will provide students with structured experience involving real patients in real time, or near real time, under the supervision of qualified pharmacy practice faculty members.

Objective

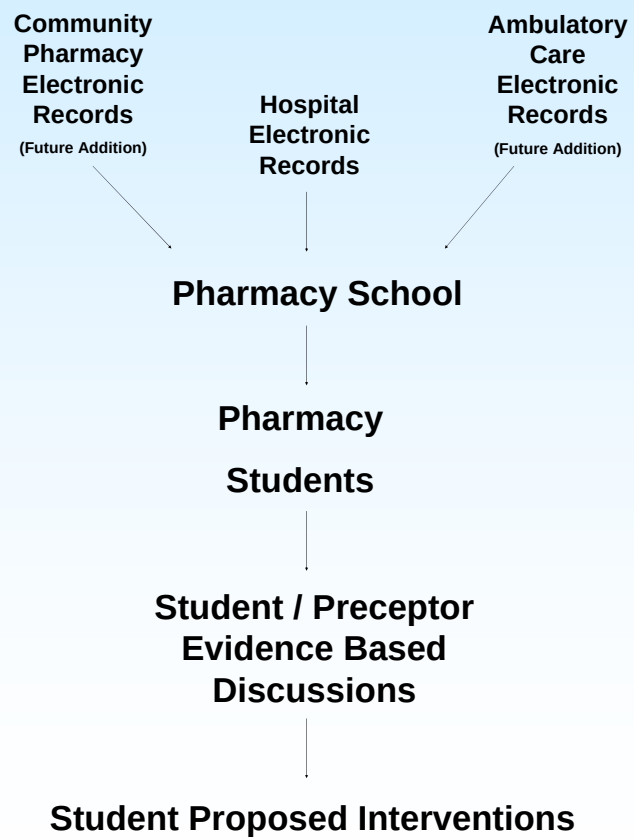
To establish a non-traditional, non-institutional based experiential clinical pharmacy elective rotation that meets or exceeds ACPE requirements using anonymous electronic medical records of real patients. The aim is to improve the quality of the students' APPE education and to enhance evidence-based pharmacotherapy practices by providing a more structured experiential rotation.

Methods

LECOM School of Pharmacy is proposing to collaborate with a local hospital to develop a pilot project entitled "Non-traditional Clinical Pharmacy Rotation - NTCPR". This off-site competency-based rotation is designed to allow pharmacy students under the supervision of pharmacy practice faculty members to access hospital records of anonymous patients and to conduct evidence-based pharmacotherapy evaluations. Access to these real world patient records will include the pharmacy medication profile, laboratory data, microbiology results, physician dictation notes, and other clinical and diagnostic test results. The students' case evaluation and treatment recommendations will form the basis for assessing students' performance and group discussions.

Summative and formative evaluations will be designed to assess evidence-based pharmacotherapy knowledge and skills gained by the students in comparison with a matching group who were not enrolled in the pilot project.

Providing Pharmacy Rotations Through a Central Location



Discussion

The availability of high quality experiential sites with experienced preceptors is becoming limited due to increased enrollments and competition for sites between pharmacy programs. With this current environment in mind and to ensure that LECOM School of Pharmacy students have crucial clinical experiences that may be missed in traditional rotations we are proposing an experimental APPE elective rotation based at a central location for 5 students precepted by pharmacy practice faculty. The clinical material for our pilot will be the electronic medical records of anonymous real patients accessed from a local hospital that is affiliated with the School of Pharmacy. Online, Students will access an assigned case and will be able to retrieve the patient's medical record, conduct evidence-based pharmacotherapy evaluation, and develop a drug treatment plan. The students' recommendations and their suggested clinical interventions will form the basis for their rotation evaluation. A core competency of this elective rotation is the students' ability to communicate effectively evidence-based drug treatment plans. Collaborating with each other, a significant time will be spent by the students in reviewing, evaluating, and discussing the assigned case. Evidence-based medical literature will be required to back-up any proposed clinical interventions or treatment recommendations. In addition, during this 6-week rotation, students will be asked to formulate broader questions that they consider important to improve public health and explore the opportunity for future research. The vision is to stimulate a research interest in the public health area and thus professional growth in our future pharmacists.

With this elective rotation being located at the school of pharmacy the students will potentially have more than one pharmacy preceptor with different practice specialties and backgrounds. Students could potentially, in a 6-week rotation be exposed to various patient cases with a multitude of disease states including in the areas of cardiology, infectious disease, internal medicine, and intensive care medicine.

Despite accessing medical records from an off-site source, we believe the students will have an APPE rotation that has a patient-centered focus.

Conclusion

NTCPRs, if proven effective, will provide a more structured, quality Advanced Pharmacy Practice Experience for Doctor of Pharmacy students in the near future.

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