

Indiana University School of Medicine – Education Innovation

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Consortium project concepts

Pharmacogenetics: The effect of medical genetics on healthcare is evolving rapidly, especially pharmacogenetics. A patient's genetic composition influences that patient's risk of developing a medical problem and that patient's response to treatment. Providers will be increasingly tasked with integrating genomics data into a patient's care plan. Providers will also play an essential role in helping patients understand their own genetic data. This project will incorporate genomics data into lessons for both UME and GME applications.

Population Health: It is critical for students to understand the importance of public health, the interaction with the community, and the medical and social issues that impact patients and health care delivery. The long term goal is to increase the relationship between IUSM faculty, learners and the affiliated community partners. The first iteration of this project for AY 2018-19 enhanced students' opportunities for community engagement while teaching them lifelong skills in the impact of social determinants of health.

Value based care: The tenants of value-based care include achieving better patient health outcomes while minimizing costs to the patient and the system, while operating with improved efficiency. This project will utilize the cost information in the Regenstrief Electronic Health Record Clinical Learning Platform (RECLP) to enable learners to integrate the core concepts of value-based care into undergraduate medical education and be familiarized with the core concepts of value-based care.

Grant team members

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Consortium projects

Pharmacogenetics: Pharmacogenomic data provided in the Regenstrief Electronic Health Record Clinical Learning Platform (RECLP) will be integrated into clinical cases. Working through the cases, learners will use the genomics data to help guide diagnostic and therapeutic decisions, be coached on how to help patients interpret their genomic data and how to navigate ethical dilemmas that arise. The impact on insurance and practice principals will also be covered. Advanced students in clinical rotations and residents will use pharmacogenomic cases for exposure to principles they may not have received as part of their traditional rotations.

Student/resident knowledge and competence will be measured by traditional subject matter testing at the outset of the project. Program outcomes will be measured by the trends of these tests and by student/resident evaluation of the relevance of these exercises to their medical education.

Population Health: Virtual groups composed of 3rd year students, located throughout our 9 campus system, looked at a health issue of interest to them that is known to affect Indiana citizens. With a focus on prevention, healthcare access or interventions, student groups identified community stakeholders and developed a Community Health Improvement Project that was presented at the end of their clerkships. Evaluation results and discussions with the School of Public Health will be used for enhancing the experience going forward.

Value Based Care: RECLP contains the cost of care for the top 100 tests ordered within the healthcare system. Using RECLP students will make evidence-based treatment decisions for selected patients while being made cognizant of the associated costs. Students will follow patient costs over multiple visits, examine potentially duplicative or wasteful testing in parallel to re-examination of patient outcomes. Lastly, students will utilize RECLP to compare and contrast the cost of care in populations of patients in whom chronic disease is well controlled and those in whom disease is not well controlled.

Student knowledge/competence will be measured by traditional subject matter testing and assignments. Program outcomes will be measured by students' evaluation of the relevance of these exercises to their medical education.

Need/Gap Addressed

Pharmacogenetics: Surveys have shown that most healthcare providers believe genomics is an important part of health but are not comfortable recommending genomics-based testing or treatment. This lack of confidence stems from a lack of training. Therefore, we think it critical to start genomics training early in medical school and continue education through GME training and into practice (CME).

Population Health: IUSM is in a unique position to take advantage of the population and provider demographics as well as the broad distribution of faculty expertise and experience at the 9 campuses that are geographically distributed in Indiana. The overarching project goal was to increase the relationship between IUSM faculty, learners and the affiliated community partners. Additionally this project enhanced students' opportunities for community engagement while teaching them lifelong skills in the impact of social determinants of health. Plans are underway to increase the opportunities for student engagement with community health issues.

Value based care: Value-based care has become a healthcare delivery model increasingly used by healthcare agencies, replacing the traditional fee for-service system by rewarding providers and their facilities based on achieving quality standards in patient care. Since 2012, the integration of this model across the country has spanned initiatives driven to improve outcomes of the population at reduced costs. It is critical that today's learners be aware of this model, preparing them for the healthcare delivery of their futures.

Institutional Contact

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