Purpose: The “Basic Science of Health Care” course was designed to help all health science students understand that: 1) the delivery of excellent medical care requires an interdisciplinary approach; 2) there are many barriers in the current health-care environment to the delivery of safe, effective, evidence-based care, and that these problems can be remedied; 3) the health care delivery system is buffeted by many structural and economic constraints that inhibit the delivery of excellent, efficient medical care; 4) information systems play an essential role in improving and delivering cost-effective, error-free medical care; and 5) professionalism includes the personal obligation of all health care professionals to work together to remove the barriers to the delivery of safe, effective, and evidence-based care.

Methods: The content of this course is delivered in 17 two-hour weekly sessions to 148 second-year medical students and 30 students from other health science schools, including graduate nursing students and selected students from the other health sciences schools at the University of Pittsburgh. The faculty is interdisciplinary with representation from medicine, nursing, public health, pharmacy, rehabilitation and dental medicine. The content is divided into three thematic segments: a) how the health care system works (or doesn’t); b) safety and quality; and c) interdisciplinary collaboration, problem-solving, and creativity in health care delivery. Instruction methods include didactic sessions reinforced by small group experiences (PBLs) focused on a problem related to the course objectives.

Results: A focus on the “science of implementation” of health care has galvanized multidisciplinary interest across our health science schools, including medicine, nursing, dentistry, pharmacy, rehabilitation and public health. The concept, framed in this way, has also helped to integrate the interests of both academic and clinical managers.

Conclusions: Conceptualizing topics about the workings of the health care system, patient safety, quality improvement, and interdisciplinary collaboration under the rubric of the “basic science of health care,” while emphasizing the translation of knowledge into action, provides students with the foundational knowledge they will need to succeed and to lead in tomorrow’s health care delivery system.