

FP MD 7600: Population Health Management

Credit Hours:

1 Credit hour

Contact Information

Name	Position	Phone/Pager	Email
Brent C. James, MD, MStat	Director	801-580-8451	Brent.james@utah.edu
Anna Darelli-Anderson	Coordinator	801-213-2598	anna.darelli-anderson@utah.edu

Course Information

Brief Description of Course

In 2010, an Institute of Medicine expert panel estimated that a minimum of 30 percent, and probably over 50 percent, of all money spent on health care is waste – non-value adding from a patient's perspective. Some have asserted that waste could account for as much as 65 percent of all health care spending. In 2018, a mid-point 50 percent estimate totals to more than \$1.8 trillion dollars in financial opportunity.

Almost half of all waste extraction opportunities – almost a trillion dollars per year – fall within a relatively new approach called "population health." Population health includes (1) treatments provided even though associated risks outweigh any potential benefit to the patient; (2) treatments that patients would have refused, had they been given a complete description of the treatment and its likely outcomes; and (3) high-order treatments (specialist visits, hospitalizations, ED visits, or surgical procedures) that a patient could have avoided with better "upstream" health behaviors, social networks, physical environment, public health, or primary care (low-order treatments).

Population health is strongly associated with new "pay for value" health financing mechanisms. Both seek to control health care costs, aligning financial incentives around waste elimination through better clinical outcomes. "Bending the cost curve" could keep health care services widely accessible within modern societies.

Process management science (quality improvement) provides a very strong framework to understand then manage population health, directly addressing both clinical and financial issues. On that foundation, this course will support medical students as they prepare to effectively execute population health principles within a value-based healthcare framework.

Course Goals

2.

3.

4.

As a result of successfully completing the Population Health Management course, students will be able to:

- 1. Describe fundamental principles of Dr. W. Edward Deming's process management strategies
 - Understand and explain two primary dichotomies in healthcare management and their associated tensions:
 - a. Dichotomy 1: mission vs money and politics.
 - b. Dichotomy 2: How does "disease treatment" link to "health"?
 - Apply sources of health to build an initial functional model of Population Health
 - a. Discuss how patient centered care is integrated into the population health model
 - b. Define "move upstream" strategies
 - Understand and describe waste models in the health care management, including:
 - a. "Activity-based costing"
 - b. A nested, 3 level model for care-associated waste
- 5. Combine the initial Population Health model with the Waste model to describe an advanced model of healthcare management
- 6. Discuss on an industry-wide shift in pay-for-value, including:
 - a. Market success of existing vertically integrated health systems (e.g., Kaiser Permanente).
 - b. Explicit, policy-driven shift of government funded programs into "payer at risk".
 - c. "Direct to business" strategies, where large employers contract directly with care delivery systems
 - d. Consolidation of payers and providers



Course Format & Schedule

Timeline

This course is asynchronous and longitudinal, occurring throughout the entire semester. Work may be completed as possible within the student's schedules. Students are expected to work an average of 3 hours per week, for a total of 40 hours total, throughout the semester.

Educational and Instructional Modalities

Modality	Percentage
Asynchronous Remote	70%
Learning Modules/Quizzes	
Large Group Sessions	30%

Role of the Student in this Course

Asynchronous Remote Learning: Students will complete the asynchronous remote learning modules and associated assignments available on Canvas. These contain the materials necessary to master the course objectives and to succeed in the course. These are available at the beginning of the course and can be completed as possible within the students' schedule. Each video lecture will be apprx. 1 hour long, with readings and quizzes taking approximately 2 additional hours. The anticipated commitment for the average student is 40 hours over the full course.

Large group sessions: Held each month with Dr. James with the intention to clarify topics covered in the asynchronous remote learning and to help adjust QI projects.

Required Textbook(s)/Readings

This is a relatively new field in health care delivery operations, world-wide. As a result, there are no adequate text books available to comprehensively address the topic. The course will be based on assigned readings (papers, book chapters, and case studies), web-based video presentations, but mostly slide sets used for in-class lectures. These materials will be available on the course's Canvas site.

Each video lecture has an associated list of Competencies. A document listing those competencies will accompany each video lecture on Canvas. All material included on tests (midterm exam, final exam) will be drawn directly from the Competency lists. Because there is no textbook, class attendance is essential. There currently is no other way to master the course material.

Assessment & Grading

Assessments

Assessment Name	Weight toward Final Grade	Course Goal Assessed	Due Date
Asynchronous Learning Modules	60%	1-5	5/1/2022
Midterm Exam	20%	1-2	3/6/2022
Final Exam	20%	3-5	5/1/2022

Grading Criteria

Learning modules will be graded on a completion-based system, with specific lists of competencies and short, associated learning quizzes posted on Canvas for each module. Resubmission of each quiz will be allowed, taking the highest score earned into account for the grade.

The midterm will address the first 5 video lectures (omitting the Introduction video):

- 1. Population Health Mission vs Money
- 2. Population Health Disease Treatment vs Health
- 3. Population Health Model 1

The final exam will address the final 5 video lectures:

- 4. Population Health Activity-Based Costing
- 5. Population Health A Comprehensive Waste Model and Payment



- 6. Population Health Specific Examples of Better Health and Lower Costs
- 7. Population Health What Does the Future Hold

*Note—the listed modules reflect previous videos used, and 3 additional modules are under development (completion by 9/2021) to further build out Quality Improvement education objectives

The final exam will not include topics covered on the midterm exam. Each exam will be scored on a 100-point scale, with a minimum-passing grade of 60% for each exam. A total of 80% for the course will be required to pass the course. Questions on midterm and final examinations will be derived directly from the slides used in class. Students are free to use the course slides, and any other computer- or paper-based materials during examinations. However, students are not to work together on the examination. If students do work together on the examinations, the total points scored by the highest scoring person involved will be split equally among members of that group.

Grading System

Students will receive a final letter grade of PASS (P), or FAIL (F) for this course.

PASS: A student who achieves the criteria, will be assigned a grade of PASS for the course.

FAIL: A student who fails to achieve the criteria for PASS, will be assigned a grade of FAIL for the course.



Student Feedback

Student feedback is an important aspect of curriculum quality improvement. Thus, students are expected to complete all assigned feedback surveys specific to a course by the due date.

Standard Policies

Please refer to the Student Handbook (on the Student Affair's website) for these policies:

Accommodations Addressing Sexual Misconduct Dress Code Examination and Grading Policies Grade or Score Appeal Professionalism, Roles & Responsibilities Mistreatment Infectious, Environmental and Bloodborne Pathogen Exposures Policy

Alternate Name and/or Personal Pronoun

Class rosters are provided to the instructor with the student's legal name as well as 'Preferred' first name (if previously entered by you in the Student Profile section of your CIS account). While CIS refers to this as merely a preference, we will honor you by referring to you with the name and pronoun that feels best for you in class, on papers, exams, group projects, etc. Please advise us of any name or pronoun changes (and please update CIS) so we can help create a learning environment in which you, your name, and your pronoun will be respected.

Center for Disability & Access Services

The School of Medicine seeks to provide equal access to its programs, services and activities for all medical students. The Center for Disability and Access (CDA) provides accommodations and support for the educational development of medical students with disabilities. Medical students with a documented disability and students seeking to establish the existence of a disability and to request accommodation are required to meet with the CDA Director for recommended accommodations. The CDA will work closely with eligible students and the Academic Success Program to make arrangements for approved accommodations. The School of Medicine and CDA maintain a collegial, cooperative, and collaborative relationship to ensure compliance with federal and state regulations for students with disabilities.

Steven Baumann EdD, School of Medicine Senior Director of Academic Success Program, serves as the liaison between the School Of Medicine and the CDA.

Contact Information: Dr. Steven Baumann, Senior Director of Academic Success Program 1C047 SOM Office: 801-587-9797 Email: <u>Steven.Baumann@hsc.utah.edu</u>

University of Utah Center for Disability and Access Olpin Student Union Building, Room 162 Phone (Voice/TDD): (801) 581-5020 http://disability.utah.edu