

Course Overview

Welcome to Essentials of the Profession! Taught by a diverse faculty of clinicians and researchers, Essentials will allow Medical and Dental students to develop the skills and perspectives needed to:

1. Critically evaluate evidence and use it appropriately in their clinical decisions;
2. Understand the social, economic, and political forces that affect both the burden of disease and the ability of the health system to ameliorate it;
3. Understand the health policy context in which they will practice; and,
4. Become grounded in the ethical principles that underlie clinical care

The course has four components (details below), which will run in parallel:

- [**Clinical Epidemiology and Population Health**](#)
- [**Social Medicine**](#)
- [**Health Policy**](#)
- [**Medical Ethics and Professionalism**](#)

These disciplines are interrelated and complement each other and there are many sessions that integrate across these components (e.g., research ethics, health disparities, responsibility for treatment outcomes). All students will return to these topics in Essentials 2, a course taken during the 3rd and 4th year.

The components, and the integrated sessions, are visible on the session grid on the course homepage. **All materials needed for the course are also available from that grid:** if you click on a specific session, you'll be taken to a page that provides background information, instructions, guiding questions, and links to the resources and readiness assessment exercises.

Types of Sessions

Essentials is a bit different from your prior classes in the types of sessions we use. While there will be sessions in the learning studios, we also have many sessions in the TMEC amphitheater in which faculty present material or lead an exercise for the entire class. A large fraction of our sessions are in small groups (10-11 students plus 1-2 small group leaders). We have found that the small groups provide the best venue for discussing some of the potentially charged topics that we will take up. Please make sure to look at your [**learning studio table assignments and your small group number and room assignments \(<https://canvas.hms.harvard.edu/courses/1040/pages/table-assignments-and-small-group-rooms>\)**](#). Because HST students will be joining for three of the four components of the class, students will have two small group assignments. One is for the Clinical Epidemiology and Population Health sessions and the other grouping is for the other three components of Essentials.

Preparatory materials and grading

Consistent with the rest of the curriculum, the focus of the Essentials curriculum is on advance preparation, active participation in all classroom sessions, and team-based learning. We have designed

the preparation work for each session (e.g., readings, videos, and occasional other assignments) so that it can be done in two hours. This should leave you with four to six hours of prep work each night, with less on Wednesdays when POM meets in the afternoon, and less on Tuesdays so that you have time for POM prep. We have asked our faculty to minimize the repetition of any content in the sessions and assume you have completed all the preparatory materials.

Your final grade (pass-fail) will be determined by:

- 10% Readiness Assessment Exercises (RAE) for each discipline
 - Some RAE are graded based on right or wrong answers; others give credit for completion
- 25% Participation
 - This is graded throughout the course and is assessed by the small group and learning-studio leaders
 - Students are graded on a 1-4 scale. 1 is misses multiple sessions or speaks rarely while 4 is a real standout in terms of facilitating conversation and contributions to discussion. Our expectation is that most students will get a 3, a minority might get a 2 or 1, and one or two will get a 4.
- 25% Midterm (January 18th)
- 40% Final Exam (February 1st)

To pass the course, your overall grade must be in the passing range and you must get a passing score on each of the course components (e.g., ethics, health policy, etc.) of the final exam.

Course Faculty

Because of our commitment to the small groups sessions, we have [many faculty involved in the course](https://canvas.hms.harvard.edu/courses/1040/pages/faculty-bios-and-email-list) (<https://canvas.hms.harvard.edu/courses/1040/pages/faculty-bios-and-email-list>) (over 100 total!).

We think you will enjoy being introduced to faculty across many departments and hospitals at HMS as well as many faculty outside of HMS who work in relevant non-profit and for-profit organizations. They are all excited to work with you and to make each of the sessions collaborative and successful.

There are 9 faculty who represent the core leadership in the class and lead individual components.

- [Ateev Mehrotra](mailto:Ateev.Mehrotra@hcp.med.harvard.edu) (<mailto:Ateev.Mehrotra@hcp.med.harvard.edu>), M.D., M.P.H., Associate Professor of Health Care Policy and Medicine, Overall Course Director
- [Anthony Breu](mailto:Anthony.Breu@va.gov) (<mailto:Anthony.Breu@va.gov>), M.D., Assistant Professor of Medicine
- [Laura Garabedian](mailto:Laura.Garabedian@post.harvard.edu) (<mailto:Laura.Garabedian@post.harvard.edu>), M.P.H., Ph.D., Assistant Professor of Population Medicine
- [Edward Hundert](mailto:Edward_Hundert@hms.harvard.edu) (mailto:Edward_Hundert@hms.harvard.edu), M.D., Dean for Medical Education, Daniel D. Lederman, M.D., Professor in Residence of Global Health and Social Medicine and Medical Education
- [Nancy Keating](mailto:Nancy_Keating@hcp.med.harvard.edu) (mailto:Nancy_Keating@hcp.med.harvard.edu), M.D., M.P.H., Professor of Health Care Policy and Medicine
- [Louise P. King](mailto:Louise_P_King@bidmc.harvard.edu) (mailto:Louise_P_King@bidmc.harvard.edu), MD, JD, Assistant Professor of Obstetrics, Gynecology and Reproductive Biology at Harvard Medical School
- [Emily Oken](mailto:Emily_Oken@hphc.org) (mailto:Emily_Oken@hphc.org), M.D., M.P.H., Professor of Population Medicine, HMS

- [Dan Palazuelos](mailto:Daniel_Palazuelos@hms.harvard.edu), M.D., Assistant Professor in Medicine, and of Global Health and Social Medicine
- [Scott Podolsky](mailto:scott_podolsky@hms.harvard.edu), M.D., Professor of Global Health and Social Medicine

Course Manager:

- [Rob McCabe](mailto:rob@hms.harvard.edu), Office of Curriculum Services

Clinical Epidemiology and Population Health

Led by

- [Laura Garabedian](mailto:laura.garabedian@post.harvard.edu)
- [Emily Oken](mailto:emily_oken@hphc.org)

We focus on the core skills for interpreting evidence for the treatment of individual patients and an introduction to considering health and health care at the population level. An overarching goal is to make clear that the problems of individual patients and those of populations form a continuum, requiring both coordinated treatment of individuals and population-wide interventions. Our aims are to teach you the specific skills of clinical epidemiology to interpret and apply medical evidence to disease prevention and care for individual patients and populations.

In Essentials, we will compare the relative benefits and risks of different methods of prevention, diagnosis and treatment. Studying statistical principles will help us understand how uncertainty affects our interpretation of data and clinical decisions. These skills are essential for using medical literature to inform patient care and for creating effective population health interventions. In addition, we seek to help students gain specific skills that will foster critical thinking including probabilistic thinking, assessing the evidence for causal connections on the basis of available data and effective use of (always imperfect) diagnostic test information.

Objectives:

- Evaluate the strengths and weaknesses of medical evidence;
- Identify factors that can distort medical evidence – chance, bias, and confounding;
- Apply the most appropriate study design for the question to be answered;
- Select and interpret appropriate statistical approaches to evaluate data;
- Interpret evidence to inform care of patients, including data from screening and diagnostic tests and technologies;
- Effectively communicate to patients the benefit and harm of interventions to prevent and treat disease.

Social Medicine

Led by

- [Dan Palazuelos](mailto:dpalazuelos@bwh.harvard.edu)
- [Scott Podolsky](mailto:scott_podolsky@hms.harvard.edu)

Social, economic, political, historical, and environmental forces drive who gets sick, what diseases afflict them, which treatments are available, who has access to those treatments, and the outcomes of those treatments. Why are outcomes of HIV infection so different in different countries, and why do they vary widely even within the United States? Why do so few people who are addicted to opioids receive treatment for that disease?

All physicians and dentists encounter such questions in their clinical work, whether they work in Boston, elsewhere in the United States, or overseas. These questions cannot be answered by studying molecular biology and pathophysiology alone. Social medicine incorporates the quantitative and qualitative social sciences (e.g., economics, epidemiology, anthropology, history, sociology, and others) to understand how social factors at different scales influence the development and ascribed meanings of prevailing diseases and conditions, and the response to them. It seeks to understand the connections between local and global so that insights gained in one setting can be adapted and applied to others.

In January, we will teach you the theory and practice of social medicine so that you can recognize the social, economic, and political contexts that affect your patients, and how to design interventions that can bring about the best health outcomes. This will make clear why a thorough Social History is an essential component of a clinical evaluation.

Our small group discussions will provide a space to evaluate and critique available evidence and policies, understand and debate different perspectives, and brainstorm about what we can do to optimize the health and well-being of our patients.

Objectives:

- Demonstrate the social determinants of disease and health inequalities;
- Analyze how social factors influence medical and dental knowledge and practice;
- Examine the subtleties of therapeutic efficacy;
- Showcase innovative clinical programs that seek to overcome the many obstacles to good health and health care; and
- Explore what you can do to improve health outcomes in local, national, and global contexts.

Health Policy

Led by

- [Ateev Mehrotra \(mailto:Ateev.Mehrotra@hcp.med.harvard.edu%20\)](mailto:Ateev.Mehrotra@hcp.med.harvard.edu)
- [Nancy Keating \(mailto:keating@hcp.med.harvard.edu\)](mailto:Nancy.Keating_(mailto:keating@hcp.med.harvard.edu))

The purpose of the health policy curriculum is to introduce students to the key features of the United States health care system—its institutions, its organization, and its financing—as well as the concepts needed to evaluate health policy issues.

Our sessions start with a focus on how insurance markets work with sessions that follow on the key components of a health system – how are providers organized and paid. We will also debate how to measure quality. Our final synthesis session will be a debate on the merits of Medicare for All. To

encourage rich discussions in our small group sessions, we will be asking students to role play certain perspectives such as a health plan CEO or Senate Majority Leader Mitch McConnell.

Similar to clinical medicine, health policy includes a lot of jargon. We recommend this [Health Reform Glossary](https://www.kff.org/glossary/health-reform-glossary/) (<https://www.kff.org/glossary/health-reform-glossary/>). For those who are inspired over the winter break, the following textbook and podcasts might provide useful background:

- [The Health Care Handbook: A Clear and Concise Guide to the United States Health Care System](https://www.amazon.com/Health-Care-Handbook-Concise-System/dp/0615650937/ref=asc_df_0615650937/?tag=hvprod-20&linkCode=df0&hvadid=312425492373&hvpos=1o1&hvnetw=g&hvrand=16605487917026348566&hvpo ne=&hvptwo=&hvqmt=&hvdev=c&hvdvcmdl=&hvlocint=&hvlocphy=9002070&hvtargid=pla-571498272695&psc=1) (https://www.amazon.com/Health-Care-Handbook-Concise-System/dp/0615650937/ref=asc_df_0615650937/?tag=hvprod-20&linkCode=df0&hvadid=312425492373&hvpos=1o1&hvnetw=g&hvrand=16605487917026348566&hvpo ne=&hvptwo=&hvqmt=&hvdev=c&hvdvcmdl=&hvlocint=&hvlocphy=9002070&hvtargid=pla-571498272695&psc=1)
- This American Life
 - [More Is Less](https://www.thisamericanlife.org/391/more-is-less) (<https://www.thisamericanlife.org/391/more-is-less>)
 - [Someone Else's Money](https://www.thisamericanlife.org/392/someone-elses-money) (<https://www.thisamericanlife.org/392/someone-elses-money>)

Medical Ethics and Professionalism

Led by

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- [Edward Hundert](mailto:Edward_Hundert@hms.harvard.edu) (mailto:Edward_Hundert@hms.harvard.edu)
- [Louise P. King](mailto:lpking@bidmc.harvard.edu) (<mailto:lpking@bidmc.harvard.edu>)

Within medicine and dentistry, the right thing to do is often dictated by pathophysiology and the evidence-base. But, sometimes, you will encounter situations in which the right to do is less clear. Should I intubate this patient in order to save their life, even if they express a vehement objection? How should a scarce resource (e.g., donor kidney) be allocated? Medical ethics is the discipline that aims to provide a structured way to answer these questions.

During Essentials in January, we will continue the exploration of topics in Medical Ethics and Professionalism that began in August when we discussed Confidentiality and Social Media as part of your Introduction to the Profession. This was followed by an additional session covering Truth-Telling. During the January term, new topics will be introduced (informed consent, research ethics, rationing, futility, deciding for others, ethical distinctions in end-of-life care, disparities, and reproductive ethics). These topics will be discussed in a graduate seminar format in separate sections with an enrollment of 10-11 students.

Objectives:

- Recognize a wide spectrum of issues in medical ethics and professionalism when they encounter these issues, from the most obvious examples such as abortion to less obvious examples such as whether to order an MRI for routine headache.
- Discuss in some detail concepts that are foundational to medical ethics, such as the requirements for the ethical conduct of research and the assessment of capacity, with a working knowledge of each

requirement (e.g., how to assess competency to give informed consent or to create an advanced directive), along with some of the key laws that bear on these foundational issues in practice.

- Establish their own views based on critical examination of all facets of an issue, with the ability to apply and articulate rigorous reasoning in moral discussion both to understand more deeply the basis for differences in perspectives and to engage collaboratively in “preventive ethics” to minimize situations that force potentially unnecessary tradeoffs between moral values.
- Develop an openness to experience rigorous ethical analysis as clinically helpful and important in the process of reaching resolution in actual patient cases, while also developing a tolerance for the unresolvable ambiguities that inevitably arise when applying value propositions to these actual patient cases.
- Appreciate the centrality to physicians of being ethical as well as medically competent, with enthusiasm for continuing to learn more about ethics as well as medicine throughout their careers.