HPM 505: HEALTH CARE DELIVERY REFORM IN THE US
9:45-11:15 AM, Tuesday and Thursday; Spring 1 (January 29 – March 14, 2020)
FXB G11

Professor
Michael L. Barnett, MD, MS
Assistant Professor
Health Policy and Management
mbarnett@hsph.harvard.edu

Office Hours
By appointment in Kresge 407
Email Lily McCarthy to schedule:
lmccarthy@hsph.harvard.edu
(office hours for final write-up on page 8)

Teaching Assistant
Benjamin Todd (MPH-65, HM)
btodd@hsph.harvard.edu

Credits
2.5

Course Description

Health care delivery in the US is an enormous, complex, and fragmented system of hospitals, clinics, rehabilitation facilities and other services. These systems have matured under the payment incentives and culture of US health care to emphasize high volumes of services, often neglecting population health and patient experience as key goals. Increasing recognition that the current delivery system fails to deliver person-centered, high quality health care to populations has led to many delivery reform initiatives. These reforms are where the "rubber hits the road" for health systems adapting to new payment incentives and shifting the status quo.

The overall purpose of this course is to provide students with a strong foundation of knowledge on the current state of the US health care delivery system and to develop tools to understand and critically evaluate major delivery reforms. This course has three main objectives:

(1) Illustrate the current state of health care delivery across the spectrum of settings (e.g. hospital, clinic, nursing home) and the major challenges facing this system;
(2) Develop a deep understanding of important delivery reform initiatives being pursued across the US and critically evaluate their capacity to achieve intended change
(3) Explore the challenges in implementing these delivery reforms.

This course is designed to cover complementary, distinct material and perspectives on health delivery from other HPM course offerings such as HPM 516 (Quality and Safety in Health Care), HPM 235 (Managing Health Care Costs) and HPM 255 (Payment Systems in Health Care). Some material may overlap slightly between these courses given the interconnected nature of policy, payment systems and health care delivery. This course is targeted towards a broad range of students interested in careers involving health care delivery as clinicians, researchers, public health officials, administrators, consultants, or other paths.

Prerequisites

No formal prerequisites are required for this course. However, students are expected to have familiarity with the US health care system and payment systems for health care. Without this background, students may feel lost in discussions as there will be limited time to review fundamental concepts in the US health care system. If you have any questions, feel free to email Prof. Barnett to discuss.

For students without this background, examples of courses that cover the appropriate material include: HPM 210 (United States Health Policy), HPM 211 (The Health Care Safety Net and Vulnerable Populations), HPM 235 (Managing Health Care Costs), and HPM 255 (Payment Systems in Healthcare).

Course Objectives

By the end of the course, students will be able to:

1. Identify and describe the key components of health care delivery in the US and the major challenges faced by the delivery system.
2. Compare and contrast key features of important delivery reform initiatives being pursued in the context of national and state health policy.
3. Critically evaluate research studies related to health care delivery innovations and gain familiarity with key studies in the area.
4. Discuss potential approaches and challenges in successful implementation of major delivery reforms.
5. Interpret current debates around controversial health care delivery innovations and defend a position on these issues using empirical evidence and analysis of the US health care delivery system.

Course Materials

Required readings for this course are available as a course packet or downloadable individually through the course website, depending on students' preferences. **Because this is an interactive and discussion-based class, there will be no laptops, cell phones, iPads, and any other electronic device in class.** Anyone using electronic devices in class without permission will have points deducted from their participation grade. Please prepare for having readings or notes available in class accordingly.

Readings for this course are drawn from several different sources, including articles from health policy and clinical journals, case studies, other reports from policy organizations (e.g. professional societies) and think-tanks, as well as and blog posts and newspaper articles that capture key elements of delivery reform. All readings will be provided via hyperlinks, which you can read online or print, according to your preference. Because no electronic device use is allowed during class, students will need to print readings to have access to them during class for reference. All readings not marked as "optional" are required unless otherwise indicated.

Course Structure

Classes will have different structures depending on the session, consisting of lectures and in-depth discussions of case studies or other assigned reading material.

1) Lecture: On days without a case study, the class will be a lecture on a health care delivery topic, followed by a reading discussion or other interactive activities, such as a guest discussant or breakout groups. Most lectures will be given by Prof. Barnett and will present typical examples of a health delivery reform and existing literature evaluating its impact. Guest lecturers with unique expertise on selected topics will also present. All lecture slides will be available after each class session.

2) Discussions: The core of the course will consist of in-depth discussions of the health care delivery topic using in different formats: reading discussions, case studies, and other more informal discussions. Case studies will have an entire class devoted to them. Reading discussions will either be incorporated in lecture or follow lecture, guided by discussion questions or a guide that will be distributed prior to each class. They will have the following rough formats:

A) *Lecture and Reading Discussion*

The goal of reading discussions is to have an engaged exchange between students, led by Prof. Barnett about the larger concepts and important nuances that connect the reading material to the class topic, guided by discussion questions. The readings are carefully chosen to provide both broad background and, when possible, competing points of view or evidence. Engaging with the tension inherent in the messy world of health care delivery is key, and thoughtful debate is encouraged. There are rarely clear answers in health care delivery and the goal of discussion

is to challenge assumptions and explore the multi-faceted impact of choosing different models of care delivery.

B) Lecture and Guest Discussant

These sessions will have a similar format and goals as lectures and reading discussions, except we will be joined by an expert implementing new models of care delivery. Our discussion of the readings will be in conversation with the expert with reflections from their frontline insight.

C) *Case Study*

Case Studies are a core component of the course. A core consideration in health care delivery reform is strategy (should we try something new? why?) and implementation (how do we actually do this and make it work?). The case studies are rich documents that contain a wealth of information, both important and trivial. Like any real-world situation, part of the challenge in reading and learning a case study is coming to your own conclusions about what information is meaningful and what deciding what data is useful to help guide decisions. Please come to class having carefully read and considered each case study and having thought through the discussion questions, even if you are not writing a response paper. *Please see the appendix for an introductory guide on how to prepare a for a case study section in the Appendix.*

B) *Debate*

One class will be an interactive debate session followed by a brief lecture. The general objective is for students to take a position on for or against a delivery reform. The context for the debate will be established with a debate handout before class. We will divide the class into groups with different roles. More detail on the exact structure of the class is laid out in more detail below.

Grading, Progress and Performance

This course assumes substantial and informed student participation. At a minimum, being informed requires class attendance, completion of reading assignments and thoughtful consideration of case studies ahead of class. Class attendance and thoughtful participation are an important part of the final grade. The final grade for this course will be based on:

Class Participation (25%)

Daily homework consists of reading the assigned materials and being prepared to discuss them. Class participation will be an important portion of your final grade. Participation is not simply whether and how much you speak in class; it is measured based on thoughtful engagement with the course materials and with your classmates. In other words, quality matters more than quantity, and listening is as important as talking. In general, I expect everyone to contribute to the class discussion at least weekly in a thoughtful manner. After the 5th class session, we will have a self-assessment check in to get instructor feedback and address any concerns students have about their role in the discussion.

Always have your name card displayed in class.

Participation will be graded according to the following rubric:

	A (27-30 points)	**B (24-26 points)**	**C (21-23 points)**	**D or less (<21 points)**
Attendance	Attends class regularly without unexcused absences and always has name card present.			Has unexcused absences.
Frequency	Always or nearly always contributes effectively to discussion over a week, respectful of others' need for input.	Sometimes contributes effectively to the discussion over a week, respectful of others' need for input.	Rarely contributes effectively to the discussion over a week, respectful of others' need for input.	Never contributes effectively to the class discussion.
Quality	Raises thoughtful questions, analyzes relevant issues, builds on others' ideas, synthesizes across readings and discussions, expands the class' perspective, and/or appropriately challenges assumptions and perspectives. Creates a positive environment for discussion, **demonstrating thoughtful listening.**			Does not contribute in the aforementioned ways or creates a negative learning environment

Please notify the instructor of an absence before the class. If you will be absent from class, let me or the TA know in advance; otherwise I reserve the right to record your absence as unexcused and it will negatively affect your class participation grade. Each student is allowed one excused absence for the course with advance notice without impacting the participation grade. Any additional absences will be excused only under unusual circumstances.

Assignments (75%)
The goal of the assignments is to encourage students to demonstrate thoughtful engagement with the course material throughout the whole course, as opposed to having a large final project.

Forum Posts and Discussion (20% based on average for posts)

We ask that you submit **one short forum post and one reply** on Canvas for 5 classes, one for each of the four pairs of sessions listed below and one for the Cleveland Clinic case:

- Group 1: The patient-centered medical home (2/6) or Advanced practice providers (2/11)
- Group 2: Extending specialty care (2/13) or Reforming behavioral health (2/18)
- Group 3: Cleveland Clinic (2/20)
- Group 4: Delivery reform for population health (2/25) or The learning health system (2/27)
- Group 5: Innovation in post-acute care (3/3) or Innovation in home-based care (3/5)

For **each session** that you choose, two posts are required, a 1) *forum post* and a 2) *reply*.
1) Forum post: A comment on the class readings for the session: this can be in response to one of the discussion questions.
2) A response to another student's comment that advances the discussion in some way.

Grading: Each pair of post and reply will be graded as ✓+ (check plus or 3), ✓ (check or 2), or ✓- (check minus or 1) according to each of the following elements:

1. *Clarity*: Presents a clear and precise point of view related to the reading assignments (for initial post) or the other student's post (for replies)
2. *Comprehension*: Demonstrates comprehension of the reading assignment or other student's post (for replies) using specific examples.
3. *Editing*: Grammar and spelling are correct. Avoids jargon as much as possible.
4. *Tone*: Appropriate and respectful tone for class discussion.

Posts that meet all of these criteria will get ✓+, those not quite meeting one criterion will get a ✓, and those that are **submitted late** or entirely miss one or more criteria (including exceeding the word limit) will get a ✓-.

Format: The forum posts should be 200 words maximum – this is very much a maximum length, not a "goal" length. This word limit will be strictly enforced because I do not want other students to feel pressured to write increasingly long posts which bogs down the discussion. Posts should have enough depth to meaningfully comment on an aspect of the readings, discussion questions or another student's post.

Due Dates: Forum posts must be submitted via the Discussion tab on Canvas by 6 pm **the evening before the relevant session** and replies by 11:59 pm **the evening before the relevant session**. The earlier deadline for forum posts allows other students time to review classmates' forum posts to write replies.

Writing Assignment 1:

Understanding the Health Care "Customer" Experience (25%)
Due BEFORE class on February 11

In this assignment, you will write a summary and analysis based on the health care experience of a friend, family member or other individual with whom you can have a frank discussion about their health. The goal of this assignment is to "walk a mile" in someone else's shoes to gain insight into one path through the US health care system, what worked well and what didn't, and why that may be.

Patient Interview

1. Identify a patient (or caregiver of a patient) who has experienced a long-term and/or serious health care concern recently (ideally in the past year). This should be someone with whom you feel comfortable discussing personal matters. Examples might include a family member who is the main caregiver for an older parent or a relative with a disability; a friend with an ongoing chronic illness such as diabetes or back pain; or someone who recently delivered a baby in the hospital or was hospitalized for another reason. There is no "right" person to interview for this assignment as long as that person is able to reflect on their health care experience.
2. Schedule a 60-minute time for an interview, preferably in person if possible.
3. Begin by asking the person to think broadly about their health, overall needs and goals as a patient. Opening questions could include:
    - Ask about what it is like to be a person in their situation, with their particular disease or health concern. How does it affect their life?
    - What are the main health-related fears, frustrations, inconveniences, and uncertainties they face?
    - What makes it hard to be a person in their situation?
    - What helps them overcome difficulties in dealing with the situation?
    - In general, does the health care system itself help to address any of the issues above?
4. Now, move to specific questions to understand the story of their recent or ongoing health care experience. Ask about the specific time when health was a problem and the interviewee saw a health care provider about it or a series of interactions they had. When your interviewee finishes one health event move on to another, until they run out of steam. Be mindful of and try to minimize interruptions. This interview is about completely immersing yourself in their experience - do not defend yourself or the health care system and try to avoid inserting your own perspective into the interview. You are there to learn. Possible questions to explore specific experiences include:
    - Ask the interviewee to describe a memorable experience in specific detail.
    - What were their fears, frustrations, inconveniences, and uncertainties?
    - What did the interviewee wish had happened that did not happen?
    - What was the hardest part about being a patient in the health care system?
    - What positive surprises did the interviewee experience?

Take detailed notes during the interview. If it will be difficult to actively listen and take notes, then consider recording the interview (with the interviewee's permission) and taking notes while replaying the recording.

Interview Write-Up

Write a summary and analysis of your interviewee's experience in a **5 page maximum** write-up. Please anonymize your description of the interviewee – you can use initials or make up a name. The write-up should be structured to address the following broad 4 topics (health issue, needs, experience, and analysis/reflection) – with at least 2 pages devoted to analysis and reflection. I have suggested specific questions to address in the write-up beneath each topic, but the exact structure of the write-up is at your discretion as long as all four elements are adequately addressed.

1) The health issue
    a. Describe the health situation the interviewee experienced. If the experience was extended or very complex, provide a brief high-level summary not longer than one page.
2) Customer needs
    a. What are the health-related needs of the interviewee?
    b. Does the health care system address these needs?
    c. What needs are met and what needs are not met?
3) Customer experience
    a. What went well in the interviewee's experience?
    b. What did not go well in the interviewee's experience?
    c. What does the interviewee wish were different about the health care system, or about their experience in general?
4) Analysis and personal reflection (**must be at least 2 pages**)
    a. Why did the health care system fail to deliver something the patient expected? What factors might be driving this?
    b. Why did the health care system succeed in delivering something the patient expected? What factors might be driving this?
    c. What did you learn from this interview that you did not previously appreciate? Is this something that others should know?
    d. What do you want to learn more about in the health care delivery system based on this interview and why?

Writing Assignment 2:

Health Care Delivery "Deep Dive" Report (25%)

- Writing Team and Topic Choice due in Canvas by midnight of **February 18** (to be approved by Prof. Barnett by February 20)
- Final Assignment due in Canvas by **5PM on March 13** (Friday after last class session)

For this writing assignment, you will pair up with another student to do a deep dive into a specific health care delivery model or reform of interest to you in a **10 page maximum** report. **Both students in each group will receive the same grade based on the quality of the assignment.**

The goal of this assignment is to:

A) Develop a deep understanding of the existing knowledge around a delivery model or reform
B) Understand and synthesize the evidence (or lack thereof) behind the model or reform and its implications for health policy and/or the delivery system.
C) Communicate A & B above in a report targeted to an informed reader who needs to make a decision on the topic you are covering (i.e. whether to invest in a delivery model or technology, or advocate for a policy, or target a specific population, or invest in further research).

Writing Team and Topic Choice (Due February 18)

- Find a writing partner who is enrolled in the class. We will have a discussion forum in Canvas for students looking to find a writing partner by topic interest. You are expected to evenly divide the responsibility and time for researching and writing this assignment with your partner. Both students in each pair receive the same grade for the assignment.

- Choose a health care delivery reform, or a model in need a reform, that is of interest to you and your writing partner that was not directly covered in a class session (or possibly covered only briefly in class). The topic does not need to be centered in the US.

- The topic needs to be narrow enough to be able to address it in some depth in 10 pages. For example, a focus of "artificial intelligence in health care" may be too broad. There usually needs to be some additional focus, like "artificial intelligence for identifying high-risk patients."

- Examples of reasonable topics, likely needing additional focus:

    - A specific health care delivery reform, for example:
        - "Hot spotting"
        - Retail clinics
        - Project ECHO
    - New technology for health care delivery reform
        - Remote patient monitoring
        - Artificial intelligence
    - A part of the health care delivery system that needs reform
        - Oral health
        - Long-term care

- **Your writing team must submit your topic for approval by Prof. Barnett by February 18.**
    - Prof. Barnett will have Office Hours at the following times to discuss writing topics with students (subject to change):
        - February 6: 11:30-1:00pm
        - February 12: 2:00-3:30pm
        - February 14: 11:30-1:00pm

Written Report (Due March 13)

- The final written report must be no more than **10 double-spaced pages** (excluding references, Figures or Tables)
- The form of the paper can vary depending on the delivery reform topic that your team covers, but the report should generally cover the major items below. Major departures from this format with justification are acceptable but must be discussed with Prof. Barnett first.

    - Background and Motivation
        - What is the importance and scope of the topic you are covering?
        - What problem does the subject of your focus try to solve, and why is that something worth the reader's attention?
    - Description of the Delivery Model/Reform
        - What is the model or reform itself?
        - How does it work (or supposed to work) and how does it fit into the current health care delivery system
    - Evidence Review and Synthesis
        - What is the evidence for or against the delivery model or reform on relevant outcomes (e.g. spending, health outcomes, provider outcomes) along with a critical synthesis of the collective evidence.
            - If no evidence exists, then present what is known and how we know it is worth pursuing, either conceptually or through an analogous example.
    - Implications for Policy or the Delivery System
        - Discuss what all of this means for future policy and investment in the health care delivery system, for example:
            - Should this model be adopted more widely? If so, why? How could that be accomplished?
            - Is additional policy necessary to promote (or discourage) any aspects of the delivery model or issue?
    - Future Research Needs
        - What don't we know that would help guide future policy or investment?
        - How could we realistically answer those questions?

Examples of writing that could fit this format include "issue briefs" published by Health Affairs, Mathematica Policy Research and others. These are not presented as models to copy, but as examples to help orient you about what these reports could look like.

- Early Childhood Home Visiting Programs And Health
- Behavioral Health Integration in Primary Care: A Review and Implications for Payment Reform

For All Writing Assignments:

Grading: Papers will be graded using the general rubric attached to the end of the syllabus. Overall, grading focuses on the overall coherence of the analysis and realistic assessments considering multiple points of view. Grading will also be based on the professionalism of the presentation itself and the persuasiveness of the writing together with careful editing. When researching topics, appropriate academic sources such as peer-reviewed literature are preferred (e.g. do not cite sources like Wikipedia). Late assignments will be penalized by a full letter grade for each day late, starting when the relevant class begins.

Format: All papers should be composed in Microsoft Word or compatible software in size 12 font with 1-inch margins, double spaced. Please use page numbers on all assignments and include your names in the header of each page. Citations should be used if relying on outside sources (reference lists are not counted towards the page limit). Any citation format is acceptable but use a consistent format. Citations should include the authors, source and date of the material. Hyperlinks are acceptable but still need to contain this information (i.e. don't just paste a URL, also include the author, source and date written in the reference). Citations can be done in-line, as footnotes or endnotes.

Course Schedule

Class	Date	Topic	Guest/Case Study
		Introduction and Overview	
1	1/28	Challenges in the US Delivery System	
2	1/30	Overview of the US Delivery System	
		Primary Care	
3	2/4	Case Discussion: Iora Health	Iora Health
4	2/6	The patient-centered medical home	Discussant: Fernandopulle
5	2/11	Advanced practice providers	
		Specialty Care	
6	2/13	Extending specialty care and telemedicine	
7	2/18	Reforming behavioral health: opioid use disorder treatment	Discussant: Wakeman
		Health Systems	
8	2/20	Case Discussion: Cleveland Clinic	Cleveland Clinic
9	2/25	Delivery reform for population health	Lecture: Myers
10	2/27	The learning health system	Lecture: Horwitz
		Caring for an Aging Population	
11	3/3	Innovation in post-acute care and geriatrics	Discussant: Schwartz
12	3/5	Innovation in home-based care	Lecture: Levine
		For-Profit Delivery Reform	
13	3/10	Direct primary care	Debate
14	3/12	Investing in delivery reform	Discussant: Yeshwant

Course Readings

Please read and carefully consider each required reading before class. In particular, the case studies require thoughtful analysis to meaningfully participate in discussion and to demonstrate engagement with the material.

No electronic devices during class. No laptops, tablets, or other devices in class, and please silence all phones. This course is built on engagement as a community in discussing and considering complex topics in health care delivery and policy. Many of you may prefer to take notes electronically, but there is a clear tradeoff. People sitting in front of screens are less likely to engage their classmates, and computers/tablets/smartphones do not foster classroom discussion. PowerPoint slides will be on the course webpage in advance of each class session to minimize the need for extensive notes.

Class 1: Introduction to the US Health Care Delivery System: Challenges
Tuesday, January 28, 2020

Learning Objectives:
1) Define the concepts behind the "four C's of primary care" (continuity, contact, comprehensiveness and coordination)
2) Describe key challenges to achieving the four C's in the US.
3) Reflect on the role of personal experience in studying the US health care system.

Discussion Questions:
1) Which of the four C's do you think is most relevant to public health, and why?
2) Why are any of the four C's more or less challenging to achieve for patients with differing levels of poverty, education or illness?

Readings:
- Aronson L. Necessary Steps: How Health Care Fails Older Patients, And How It Can Be Done Better. Health Aff 2015;34(3):528–32. (https://www-healthaffairs-org.ezp-prod1.hul.harvard.edu/doi/abs/10.1377/hlthaff.2014.1238)

Optional Readings:
- For those unfamiliar with how health insurance in the US works
    - Bodenheimer T, Grumbach K. *Understanding Health Policy: A Clinical Approach*. 7th ed. New York, NY: McGraw-Hill Education; 2016.
        - Chapter 3: Paying for Health Care (http://accessmedicine.mhmedical.com.ezp-prod1.hul.harvard.edu/content.aspx?bookid=1790&sectionid=121191199#1126404711)
        - Chapter 4: Paying Health Care Providers (http://accessmedicine.mhmedical.com.ezp-prod1.hul.harvard.edu/content.aspx?bookid=1790&sectionid=121191377)
- Starfield B. Is primary care essential? Lancet 1994;344(8930):1129–33. (https://www-sciencedirect-com.ezp-prod1.hul.harvard.edu/science/article/pii/S0140673694906343?via%3Dihub)
- Bodenheimer T. Coordinating Care — A Perilous Journey through the Health Care System. New England Journal of Medicine 2008;358(10):1064–71. (http://www.nejm.org.ezp-prod1.hul.harvard.edu/doi/full/10.1056/NEJMhpr0706165)
    - Note: This reading is old but shows how little has changed in the past decade.
- Other good personal narratives:
    - Yeh C. "Nothing Is Broken": For An Injured Doctor, Quality-Focused Care Misses The Mark. Health Aff 2014;33(6):1094–7. (https://www-healthaffairs-org.ezp-prod1.hul.harvard.edu/doi/abs/10.1377/hlthaff.2013.0855)
    - Rosenbaum L. The Not-My-Problem Problem. New England Journal of Medicine 2019;380(9):881-5. (https://www-nejm-org.ezp-prod1.hul.harvard.edu/doi/full/10.1056/NEJMms1813431)

Class 2: Introduction to the US Health Care Delivery System: Overview
Thursday, January 30, 2020

Learning Objectives:
1) Describe important historical trends that have influenced the current structure of hospital, primary and specialty care in the US.
2) Understand and describe the basic components of the US health care delivery system (hospitals, physicians, long-term care, etc.).
3) Compare the US health care delivery system to the delivery system in other developed countries internationally.

Discussion Questions:

1) Which model of health care delivery do you prefer, the regionalized NHS model or the dispersed US model and why? What would you change about your preferred model if you could?
2) What findings in the Papanicolas et al. study were most surprising to you? Why did the results surprise you, and where did your prior belief about the health care delivery system come from?

Readings:

- Bodenheimer T, Grumbach K. *Understanding Health Policy: A Clinical Approach*. 7th ed. New York, NY: McGraw-Hill Education; 2016.
    - Chapter 5: How Health Care is Organized – 1: Primary, Secondary and Tertiary Care (https://accessmedicine-mhmedical-com.ezp-prod1.hul.harvard.edu/content.aspx?bookid=1790&sectionid=121191474)
- Papanicolas I, Woskie LR, Jha AK. Health Care Spending in the United States and Other High-Income Countries. *JAMA*. 2018;319(10):1024-1039. doi:10.1001/jama.2018.1150 (https://jamanetwork-com.ezp-prod1.hul.harvard.edu/journals/jama/fullarticle/2674671)

Optional Readings:

- Moses H, Matheson DHM, Dorsey ER, George BP, Sadoff D, Yoshimura S. The Anatomy of Health Care in the United States. JAMA 2013;310(18):1947–64. (https://jamanetwork-com.ezp-prod1.hul.harvard.edu/journals/jama/fullarticle/1769890)
- Sandy LG, Bodenheimer T, Pawlson LG, Starfield B. The Political Economy Of U.S. Primary Care. Health Affairs 2009;28(4):1136–45. (https://www.healthaffairs.org/doi/pdf/10.1377/hlthaff.28.4.1136)
- Green LA, Fryer GEJ, Yawn BP, Lanier D, Dovey SM. The Ecology of Medical Care Revisited. NEJM. 2001; 344(26): 2021-2024 (https://www-nejm-org.ezp-prod1.hul.harvard.edu/doi/full/10.1056/NEJM200106283442611)
- Johansen ME, Richardson CR. The Ecology of Medical Care Before and After the Affordable Care Act: Trends From 2002 to 2016. Ann Fam Med 2019;17(6):526–37. (http://www.annfammed.org/content/17/6/526)

Class 3: Iora Health case
Tuesday, February 4, 2020

Learning Objectives:

1) Describe how the "medical home" model of team-based care (as Iora Health represents) differs from traditional outpatient primary care.
2) Understand and describe the roles of non-physician providers in team-based care models.

Discussion Questions:

1) Why did Iora choose to focus its teams around health coaches? What do you think are the advantages or disadvantages of their team structure?
2) What are the key factors that make Iora a more or less appealing model for health care delivery than existing traditional primary care?
3) How would you specifically define success if you were Rushika Fernandopulle?

Readings:

- Iora Health Case (Sahlman and Vijayaraghavan; HBS 9-814-030): (https://hbsp.harvard.edu/tu/8436c20f)

Class 4: The patient-centered medical home (Guest Discussant: Rushika Fernandopulle)
Thursday, February 6, 2020

We will be joined by special guest Dr. Rushika Fernandopulle, Founder and CEO of Iora Health, for a post-case discussion in the second half of class.

Learning Objectives:

1) Describe the contrast between the "ideal" definition of the patient-centered medical home (PCMH) and its implementation nationally.
2) Summarize the existing evidence on the effectiveness of PCMH on costs, quality and patient experience.
3) Describe key components for transforming a primary care practice to a PCMH style-practice and the barriers to doing so.

Discussion Questions:

1) Why are there so many different "versions" of what PCMH means in practice?
2) What would you like to ask Rushika Fernandopulle about his decisions in the Iora Health case? What do you think his answer might be?

Readings:

- Patient Centered Primary Care Collaborative: Joint principles of the patient-centered medical home, 2007 (https://www.aafp.org/dam/AAFP/documents/practice_management/pcmh/initiatives/PCMHJoint.pdf)
- Nutting PA, Crabtree BF, Miller WL, Stange KC, Stewart E, Jaén C. Transforming Physician Practices To Patient-Centered Medical Homes: Lessons From The National Demonstration Project. Health Affairs 2011;30(3):439–45. (https://www-healthaffairs-org.ezp-prod1.hul.harvard.edu/doi/abs/10.1377/hlthaff.2010.0159)
- Sinaiko AD, Landrum MB, Meyers DJ, et al. Synthesis Of Research On Patient-Centered Medical Homes Brings Systematic Differences Into Relief. Health Affairs 2017;36(3):500–8. (https://www-healthaffairs-org.ezp-prod1.hul.harvard.edu/doi/abs/10.1377/hlthaff.2016.1235)

Optional Readings:

- Timbie JW, Setodji CM, Kress A, et al. Implementation of Medical Homes in Federally Qualified Health Centers. New England Journal of Medicine 2017;377(3):246–56. (https://www-nejm-org.ezp-prod1.hul.harvard.edu/doi/pdf/10.1056/NEJMsa1616041)
- Jabbarpour Y, DeMarchis E, Bazemore A, Grundy P. The Impact of Primary Care Practice Transformation on Cost, Quality, and Utilization. 2017 (https://www.graham-center.org/content/dam/rgc/documents/publications-reports/reports/ImpactPrimaryCarePracticeTransformationCostQualityUtilization.PDF)
- Iora Health 2018 Update:
    - Iora Health Looks to "Kick the Industry in the Behind" | HealthLeaders Media. (Accessed Dec 5, 2018 at https://www.healthleadersmedia.com/clinical-care/iora-health-looks-kick-industry-behind)

Class 5: Advanced practice providers and other health professions
Tuesday, February 11, 2020

Learning Objectives:

1) Describe the broad history and roles of advanced practice providers (nurse practitioners and physician assistants) in the US health care delivery system.
2) Outline key arguments in the debate on scope of practice laws for advanced practice providers from the perspectives of expanding primary care access vs. preserving physician centrality in the health care system.
3) Describe the role of community health workers in the health care system and evidence of their impact on patient outcomes.

Discussion Questions:

1) Should the role of advanced practice providers in the US health care delivery system be expanded or restrained, and why?
2) How do you think advanced practice providers would best fit into the existing US health care delivery system? Could they be integrated with other delivery reforms we have discussed in class or elsewhere?

Readings:

- Dunker A, Krofah E, Isasi F. The Role of Physician Assistants in Health Care Delivery (Washington, D.C.: National Governors Association Center for Best Practices, 2014) (https://web.archive.org/web/20150424090124/http://www.nga.org/files/live/sites/NGA/files/pdf/2014/1409TheRoleOfPhysicianAssistants.pdf)
- Iglehart JK. Expanding the Role of Advanced Nurse Practitioners — Risks and Rewards. New England Journal of Medicine 2013;368(20):1935–41. (http://www.nejm.org.ezp-prod1.hul.harvard.edu/doi/full/10.1056/NEJMhpr1301084)
- Donelan K, DesRoches CM, Dittus RS, Buerhaus P. Perspectives of physicians and nurse practitioners on primary care practice. N Engl J Med 2013;368(20):1898–906. (https://www-nejm-org.ezp-prod1.hul.harvard.edu/doi/full/10.1056/nejmsa1212938)

Optional Readings:

- Naylor MD, Kurtzman ET. The Role Of Nurse Practitioners In Reinventing Primary Care. Health Aff 2010;29(5):893–9. (https://www-healthaffairs-org.ezp-prod1.hul.harvard.edu/doi/abs/10.1377/hlthaff.2010.0440)
- Scope of practice: How can we expand access to care? POLITICO. (https://www.politico.com/story/2016/06/scope-of-practice-health-care-224571)
- Green LV, Savin S, Lu Y. Primary Care Physician Shortages Could Be Eliminated Through Use Of Teams, Nonphysicians, And Electronic Communication. Health Affairs 2013;32(1):11–9. (https://www-healthaffairs-org.ezp-prod1.hul.harvard.edu/doi/10.1377/hlthaff.2012.1086)
- Xue Y, Smith JA, Spetz J. Primary Care Nurse Practitioners and Physicians in Low-Income and Rural Areas, 2010-2016. JAMA 2019;321(1):102–5. (https://jamanetwork-com.ezp-prod1.hul.harvard.edu/journals/jama/fullarticle/2720014)
- Martsolf GR, Barnes H, Richards MR, Ray KN, Brom HM, McHugh MD. Employment of Advanced Practice Clinicians in Physician Practices. JAMA Intern Med 2018;178(7):988–90. (https://jamanetwork-com.ezp-prod1.hul.harvard.edu/journals/jamainternalmedicine/article-abstract/2678831)

Class 6: Extending specialty care and telemedicine Thursday, February 13, 2020

Learning Objectives:

1) Describe key barriers to accessing and using specialty care in the US.
2) Describe how delivery innovations such as live interactive telemedicine, store and forward telemedicine, eConsult/eReferral, and Project ECHO can potentially address barriers to access in specialty care and their limitations.
3) Compare and contrast different telemedicine applications in the outpatient setting and their suitability for addressing specific barriers.

Discussion Questions:

1) Is eReferral a delivery innovation that should be scaled to a larger, national level? Why or why not?
2) Compare and contrast eReferral, Project ECHO as a model?
3) What are the benefits and limitations of patient-to-specialist models (live interactive and store-and-forward telemedicine visits) compared to PCP-to-specialist models (eConsult and Project ECHO)?

Readings:

- Dorsey ER, Topol EJ. State of Telehealth. New England Journal of Medicine 2016;375(2):154–61. (https://www-nejm-org.ezp-prod1.hul.harvard.edu/doi/10.1056/NEJMra1601705)
- Arora S, Thornton K, Murata G, et al. Outcomes of Treatment for Hepatitis C Virus Infection by Primary Care Providers. New England Journal of Medicine 2011;364(23):2199–207 (http://www.nejm.org.ezp-prod1.hul.harvard.edu/doi/full/10.1056/NEJMoa1009370)
    - Project ECHO: Enthusiasm Overtakes Evidence. Health Affairs. (http://healthaffairs.org/blog/2017/01/03/project-echo-enthusiasm-overtakes-evidence/)
    - Project ECHO: The Evidence Is Catching Up With The Enthusiasm. Health Affairs. (http://healthaffairs.org/blog/2017/01/13/project-echo-the-evidence-is-catching-up-with-the-enthusiasm/)
- Chen AH, Murphy EJ, Yee HF. eReferral—a new model for integrated care. *N Engl J Med*. 2013;368(26):2450-2453. Doi:10.1056/NEJMp1215594. (http://www.nejm.org.ezp-prod1.hul.harvard.edu/doi/10.1056/NEJMp1215594)

Optional Readings:

- Barnett ML, Yee HF, Mehrotra A, Giboney P. Los Angeles Safety-Net Program eConsult System Was Rapidly Adopted And Decreased Wait Times To See Specialists. Health Aff 2017;36(3):492–9. (https://www-healthaffairs-org.ezp-prod1.hul.harvard.edu/doi/10.1377/hlthaff.2016.1283)
- Tuckson RV, Edmunds M, Hodgkins ML. Telehealth. New England Journal of Medicine. 2017 Oct 19;377(16):1585–92. (http://www.nejm.org.ezp-prod1.hul.harvard.edu/doi/full/10.1056/NEJMsr1503323)
- Olson CA, McSwain SD, Curfman AL, Chuo J. The Current Pediatric Telehealth Landscape. Pediatrics 2018;141(3):e20172334. (http://pediatrics.aappublications.org.ezp-prod1.hul.harvard.edu/content/141/3/e20172334)
- Zettler-Greeley CM. How Telehealth Stopped A Contagious Outbreak At A School. Health Affairs 2018;37(12):2092–5. (https://www-healthaffairs-org.ezp-prod1.hul.harvard.edu/doi/full/10.1377/hlthaff.2018.05181)

Class 7: Reforming behavioral health: opioid use disorder (Guest Discussant: Sarah Wakeman)
Tuesday, February 18, 2020

We will be joined by Dr. Sarah Wakeman, an addiction medicine specialist, patient advocate and Medical Director for the Mass General Hospital Substance Use Disorder Initiative.

Learning Objectives:

1) Describe and analyze systemic barriers to broad access to treatment for substance use in general and opioid use disorder.
2) Compare different primary care and specialty care-based delivery reforms for opioid use disorder treatment.
3) Analyze policy options for expanding access to treatment for opioid use disorder.

Discussion Questions:

1) Which of the primary care-based OUD treatment models in Korthuis et al seems most promising? Why?
2) Given the magnitude of the opioid crisis in the US, why hasn't there been legislation passed to lower barriers to prescribe buprenorphine or methadone?
3) Based on the assigned or optional readings, reflect on the role of stigma in the delivery of addiction care, including any experience you have had encountering stigma against individuals with substance use disorder.

Readings:

- Haffajee RL, Bohnert ASB, Lagisetty PA. Policy Pathways to Address Provider Workforce Barriers to Buprenorphine Treatment. American Journal of Preventive Medicine 2018;54(6, Supplement 3):S230–42. (https://www.sciencedirect.com/science/article/pii/S0749379718300746)
- Korthuis PT, McCarty D, Weimer M, et al. Primary Care-Based Models for the Treatment of Opioid Use Disorder: A Scoping Review. Ann Intern Med 2017;166(4):268–78. (https://annals-org.ezp-prod1.hul.harvard.edu/aim/fullarticle/2589794/primary-care-based-models-treatment-opioid-use-disorder-scoping-review)
- Snow RL, Simon RE, Jack HE, Oller D, Kehoe L, Wakeman SE. Patient experiences with a transitional, low-threshold clinic for the treatment of substance use disorder: A qualitative study of a bridge clinic. Journal of Substance Abuse Treatment 2019;107:1–7. (https://www-sciencedirect-com.ezp-prod1.hul.harvard.edu/science/article/pii/S0740547219302521)

Optional Readings:

- Tsai AC, Kiang MV, Barnett ML, et al. Stigma as a fundamental hindrance to the United States opioid overdose crisis response. PLOS Medicine 2019;16(11):e1002969. (https://journals.plos.org/plosmedicine/article?id=10.1371/journal.pmed.1002969)
- Strang J, Volkow ND, Degenhardt L, et al. Opioid use disorder. Nat Rev Dis Primers 2020;6(1):1–28. (https://www-nature-com.ezp-prod1.hul.harvard.edu/articles/s41572-019-0137-5.pdf)
- Wakeman SE, Barnett ML. Primary Care and the Opioid-Overdose Crisis — Buprenorphine Myths and Realities. New England Journal of Medicine 2018;379(1):1–4. (https://www-nejm-org.ezp-prod1.hul.harvard.edu/doi/full/10.1056/NEJMp1802741)
- Martin A, Kunzler N, Nakagawa J, et al. Get Waivered: A Resident-Driven Campaign to Address the Opioid Overdose Crisis. Annals of Emergency Medicine 2019;74(5):691–6. (https://www.annemergmed.com/article/S0196-0644(19)30358-0/pdf)

Class 8: Cleveland Clinic case
Thursday, February 20, 2020

Learning Objectives:

1) Describe the rationale and a typical approach for designing an "integrated practice unit" for specialty care delivery.
2) Discuss the role of results measurement in a large health care organization, the benefits and challenges of comprehensive results measurement.
3) Discuss the many ways in which medical systems can grow and evolve, including the benefits and drawbacks of such growth from the patient, organization and societal perspective.

Discussion Questions:

1) What is the Cleveland Clinic's overall strategy for improving value for patients? Identify two or three critical components and their rationale.
2) Visit the Cleveland Clinic's current website for treatment outcomes measurement (https://my.clevelandclinic.org/departments/patient-experience/depts/quality-patient-safety/treatment-outcomes/913-outcomes-summary). Pick an institute and examine the outcomes reported. What types of outcomes are they capturing, and are they the most valuable outcomes that the Clinic could measure? Would you advocate for this type of initiative if you were in leadership at a health system?
3) Which growth initiatives should the Clinic expand and why? Are there any growth initiatives that the Clinic should not be pursuing and why?

Readings:

- Cleveland Clinic: Transformation and Growth 2015 Case (Porter and Teisberg; HBS 9-709-473). (https://hbsp.harvard.edu/tu/8a8460d3)

Optional Readings:

- Porter ME, Thomas H. Lee MD. The Strategy That Will Fix Health Care. Harvard Business Review; October 2013. (https://hbr.org/2013/10/the-strategy-that-will-fix-health-care)

Class 9: Delivery reform for population health (Guest Lecture: Adam Myers)
Tuesday, February 25, 2020

Learning Objectives:

1) Discuss the concept and application of population health in contemporary Accountable Care Organizations (ACOs), using the Cleveland Clinic as an example.
2) Compare and contrast common strategies used by ACOs to improve population health.
3) Explore the tension between the ACO concept of "population health" vs. local community health.

Discussion Questions:

1) Is "population health" a useful term for health care delivery or public health? Why or why not?
2) What strategies, if any, commonly used by ACOs in the HHS OIG best embody the spirit of population health? Why?
3) What is the obligation of large hospitals or health systems to provide A) health care and B) economic opportunity to their local communities? Does Cleveland Clinic meet this obligation?

Readings:

- Kindig D, Stoddart G. What Is Population Health? Am J Public Health 2003;93(3):380–3. (https://ajph.aphapublications.org/doi/full/10.2105/AJPH.93.3.380)

- HHS Office of the Inspector General (HHS OIG), ACOs' Strategies for Transitioning to Value-Based Care: Lessons From the Medicare Shared Savings Program (OEI-02-15-00451) (https://oig.hhs.gov/oei/reports/oei-02-15-00451.pdf)
- POLITCO - How the Cleveland Clinic grows healthier while its neighbors stay sick. (https://www.politico.com/interactives/2017/obamacare-cleveland-clinic-non-profit-hospital-taxes/)

Optional Readings:

- Casalino LP, Erb N, Joshi MS, Shortell SM. Accountable Care Organizations and Population Health Organizations. Journal of Health Politics, Policy & Law 2015;40(4):821–37. (http://web.a.ebscohost.com.ezp-prod1.hul.harvard.edu/ehost/pdfviewer/pdfviewer?vid=4&sid=02113adf-74eb-479b-8948-0e9a43efb014%40sdc-v-sessmgr01)
- Burns LR, Pauly MV. Transformation of the Health Care Industry: Curb Your Enthusiasm? The Milbank Quarterly 2018;96(1):57–109. (https://www.healthaffairs.org/doi/full/10.1377/hlthaff.2011.0675)
- The State of Population Health: Fourth Annual Numerof Survey Report. 2019; (Report on Canvas)
- The 2017 ACO Survey: What Do Current Trends Tell Us About The Future Of Accountable Care? Health Affairs Blog. (https://www.healthaffairs.org/do/10.1377/hblog20171021.165999/full/)

Class 10: The learning health care system (Guest Lecture: Leora Horwitz)
Tuesday, February 27, 2020

Learning Objectives:

1) Describe the rationale for conducting randomized trials to evaluate clinical interventions in a real-world "learning health system" context.
2) Describe common challenges faced in implemented rapid randomized trials in a health system.
3) Describe the philosophical and ethical issues raised by randomized trials.

Discussion Questions:

1) What feasible randomized trial would you like to run in your most recent school or place of employment? What practical and ethical considerations do you anticipate?
2) Does the Meyer et al article change your view of the ethics of randomized trials? Why or why not?
3) Is it ethical to proceed with the type of randomized trials described in Meyer et al if a large proportion of individuals in an organization view randomization as inappropriate?

Readings:

- Horwitz LI, Kuznetsova M, Jones SA. Creating a Learning Health System through Rapid-Cycle, Randomized Testing. New England Journal of Medicine 2019;381(12):1175–9. (https://www-nejm-org.ezp-prod1.hul.harvard.edu/doi/full/10.1056/NEJMsb1900856)
- Meyer MN, Heck PR, Holtzman GS, et al. Objecting to experiments that compare two unobjectionable policies or treatments. PNAS 2019;116(22):10723–8. (https://www-pnas-org.ezp-prod1.hul.harvard.edu/content/116/22/10723)

Optional Readings:

Two readings that, in contrast, illustrate the profound importance of randomization:

- Initial Report: Gawande A. Finding Medicine's Hot Spots. The New Yorker 2011; (https://www.newyorker.com/magazine/2011/01/24/the-hot-spotters)
- 9 Years Later – the Randomized Trial: Finkelstein A, Zhou A, Taubman S, Doyle J. Health Care Hotspotting — A Randomized, Controlled Trial. New England Journal of Medicine

2020;382(2):152–62. (https://www-nejm-org.ezp-prod1.hul.harvard.edu/doi/full/10.1056/NEJMsa1906848)

Class 11: **Innovation in post-acute care and geriatrics** (Guest Discussant: Andrea Schwartz)
Tuesday, March 3, 2020

We will be joined by guest discussant Andrea Wershof Schwartz, MD MPH, a geriatrician using telemedicine at the VA Boston Healthcare System and Director of the Aging and End of Life Care Theme at Harvard Medical School, for a special discussion on telehealth in geriatrics in the second half of class.

Learning Objectives:

1) Describe the key components of the post-acute care and long-term care system, how individuals enter and level different sites of care (e.g. nursing homes, long-term acute care facilities)
2) Describe the major delivery challenges and barriers in the post-acute care system, including fragmentation of care, poor communication and uneven quality.
3) Outline major innovations in post-acute and long-term care, and the relative lack of innovations in this space.
4) Discuss the practical implementation of telemedicine in geriatrics.

Discussion Questions:

1) If you had to stay in a nursing home after a hospital stay or for a long-term disability, what changes would you want to see in the current system?
2) Why are post-acute and long-term care relatively neglected as sites for innovations in care delivery?

Readings:

- Kane RL. Finding the right level of posthospital care: "We didn't realize there was any other option for him." *JAMA*. 2011;305(3):284-293. doi:10.1001/jama.2010.2015. (https://jamanetwork-com.ezp-prod1.hul.harvard.edu/journals/jama/fullarticle/645103)
- Ackerly DC, Grabowski DC. Post-Acute Care Reform — Beyond the ACA. New England Journal of Medicine 2014;370(8):689–91. (http://www.nejm.org.ezp-prod1.hul.harvard.edu/doi/full/10.1056/NEJMp1315350)

Optional Readings:

- Post-acute care management and strategies, Deloitte US. (https://www2.deloitte.com/content/dam/Deloitte/us/Documents/life-sciences-health-care/us-lshc-post-acute-care-innovation-report.pdf)
- Barnett ML, Mehrotra A, Grabowski DC. Postacute Care — The Piggy Bank for Savings in Alternative Payment Models? New England Journal of Medicine 2019;381(4):302–3. (https://www-nejm-org.ezp-prod1.hul.harvard.edu/doi/10.1056/NEJMp1901896)
- TrendWatch Report: The Role of Post-Acute Care in New Care Delivery Models. American Hospital Association. (https://www.aha.org/guidesreports/2018-03-14-trendwatch-report-role-post-acute-care-new-care-delivery-models)
- Kane RL, Huckfeldt P, Tappen R, et al. Effects of an Intervention to Reduce Hospitalizations From Nursing Homes: A Randomized Implementation Trial of the INTERACT Program. JAMA Intern Med 2017;177(9):1257–64. (https://jamanetwork-com.ezp-prod1.hul.harvard.edu/journals/jamainternalmedicine/fullarticle/2635329)
- Schwartz AW. What Van Halen Can Teach Us About the Care of Older Patients. JAMA Intern Med 2017;177(3):309–10. (https://jamanetwork-com.ezp-prod1.hul.harvard.edu/journals/jamainternalmedicine/fullarticle/2596009)

Class 12: Home-based care (Guest Lecture: David Levine)
Thursday, March 5, 2020

Learning Objectives:

1) Describe the current care options available in the home in the United States and the populations who would best benefit from using them.
2) Discuss the benefits and limitations of advanced home based interventions, such as home hospital.
3) In the context of the broader health care delivery system, discuss the forces that could potentially promote greater adoption of home-based care, and the barriers to adoption.

Discussion Questions:

1) Why has home-based care has not been adopted more widely in the US?
2) Should anyone, not just the homebound, have the option to receive home-based care? Why or why not?

Readings:

- DeJonge KE, Taler G, Boling PA. Independence at home: community-based care for older adults with severe chronic illness. *Clin Geriatr Med*. 2009;25(1):155-169, ix. doi:10.1016/j.cger.2008.11.004. (https://www-clinicalkey-com.ezp-prod1.hul.harvard.edu/#!/content/journal/1-s2.0-S0749069008000700)
- Ticona L, Schulman KA. Extreme Home Makeover — The Role of Intensive Home Health Care. New England Journal of Medicine 2016;375(18):1707–9. (http://www.nejm.org.ezp-prod1.hul.harvard.edu/doi/full/10.1056/NEJMp1608301)
- Levine DM, Ouchi K, Blanchfield B, et al. Hospital-Level Care at Home for Acutely Ill Adults: A Randomized Controlled Trial. Annals of Internal Medicine 2019. (https://annals-org.ezp-prod1.hul.harvard.edu/aim/article-abstract/2757637/hospital-level-care-home-acutely-ill-adults-randomized-controlled-trial)

Optional Readings:

- Leff B, Burton L, Mader SL, et al. Hospital at home: feasibility and outcomes of a program to provide hospital-level care at home for acutely ill older patients. *Ann Intern Med*. 2005;143(11):798-808. (http://annals.org.ezp-prod1.hul.harvard.edu/aim/article-abstract/718876/hospital-home-feasibility-outcomes-program-provide-hospital-level-care-home)
- Ornstein KA, Leff B, Covinsky KE, et al. Epidemiology of the Homebound Population in the United States. *JAMA Intern Med*. 2015;175(7):1180-1186. doi:10.1001/jamainternmed.2015.1849. (https://jamanetwork-com.ezp-prod1.hul.harvard.edu/journals/jamainternalmedicine/fullarticle/2296016)

Class 13: Direct primary care (debate)
Tuesday, March 10, 2020

Learning Objectives:

1) Describe the purpose behind the direct primary care movement and the range of implementation of practice models.
2) Explain both sides of a debate for and against direct primary care as a model for health care delivery from various stakeholders' perspectives.

Discussion Questions:
Debate topic: Is direct primary care a sustainable solution to improve the delivery of primary care for populations? If so, what models of direct primary care do you support? If not, why not?

1) Is direct primary care ethical? What about from the patient's perspective? The physician's perspective?
2) Would you want to receive care in a direct primary care practice? Why would you recommend or not recommend it for others?
3) To what extent is primary care physician burnout a national public health priority? Is it addressed by direct primary care?

Readings:

- Alpert, J. & Sullivan, E. (2016). Background Note on Direct Primary Care (DPC). Boston, MA USA: Harvard Medical School Center for Primary Care (Case HMSCPC08.0)
- Huddle TS, Centor RM. Retainer medicine: an ethically legitimate form of practice that can improve primary care. Ann Intern Med 2011;155(9):633–5. (http://annals.org.ezp-prod1.hul.harvard.edu/aim/fullarticle/1033138/retainer-medicine-ethically-legitimate-form-practice-can-improve-primary-care)
- Adashi EY, Clodfelter RP, George P. Direct Primary Care: One Step Forward, Two Steps Back. JAMA 2018;320(7):637–8 (https://jamanetwork-com.ezp-prod1.hul.harvard.edu/journals/jama/article-abstract/2688238)

Optional:

- Doherty R. Assessing the Patient Care Implications of "Concierge" and Other Direct Patient Contracting Practices: A Policy Position Paper From the American College of Physicians. *Annals of Internal Medicine*. 2015;163(12):949. doi:10.7326/M15-0366. (https://annals.org/aim/fullarticle/2468810/assessing-patient-care-implications-concierge-other-direct-patient-contracting-practices)
- Doherty R, My Answer to Direct Primary Care "Evangelists." (https://www.medpagetoday.com/Blogs/CareerConsult/60762)
- Rubin R. Is Direct Primary Care a Game Changer? JAMA 2018;319(20):2064–6. (https://jamanetwork-com.ezp-prod1.hul.harvard.edu/journals/jama/fullarticle/2680728)
- Schwartz ND. The Doctor Is In. Co-Pay? $40,000. The New York Times. 2017 (https://www.nytimes.com/2017/06/03/business/economy/high-end-medical-care.html)
    - Alternative link without paywall: https://advance-lexis-com.ezp-prod1.hul.harvard.edu/api/permalink/f8a2915e-b077-4aac-9629-20904eadc944/?context=1516831
- Eskew PM, Klink K. Direct Primary Care: Practice Distribution and Cost Across the Nation. J Am Board Fam Med 2015;28(6):793–801.

Class 14: Investing in delivery reform and wrap-up
Thursday, March 12, 2020

Learning Objectives:

1) Describe the challenges and opportunities in the health care delivery system from the point of view of an investor.
2) Discuss overarching themes in the class and the future of health care delivery reform.

Readings:

- GV / Krishna Yeshwant. Google Ventures. (http://gv.com/team/krishna-yeshwant)
- Scan the web pages of some of Dr. Yeshwant's diverse and interesting health care delivery investments and come with questions!
    - Aledade (integration of primary care for global payment models): https://aledade.com/
    - Aspire Health (care management services for high risk patients): http://aspirehealthcare.com/for-patients/
    - Doctor On Demand (direct-to-consumer telehealth): https://www.doctorondemand.com/
    - One Medical (concierge primary care): https://www.onemedical.com/
    - PatientPing (data sharing for care coordination between hospitals, post-acute providers): https://www.patientping.com/
    - Quartet (matching patients to mental health providers): https://www.quartethealth.com/
    - ZappRx (streamlining specialty drug prescribing): https://www.zapprx.com/

Optional Readings:

- GV's Approach To Healthcare Investing: An Interview With Dr. Krishna Yeshwant. TechCrunch. (Accessed Dec 6, 2018 at http://social.techcrunch.com/2016/02/02/gvs-approach-to-healthcare-investing-an-interview-with-dr-krishna-yeshwant/)

GUEST BIOGRAPHIES

Rushika Fernandopulle, MD, MPP (Session 4, PCMH)

Rushika Fernandopulle is co-founder and CEO of Iora Health, a healthcare services firm based in Cambridge MA whose mission is to build a radically new model of primary care to improve quality and service and reduce overall expenditures. In 2012 he was named an Ashoka Global Fellow, and is also a member of the Albert Schweitzer and Salzburg Global Fellowships. He was the first Executive Director of the Harvard Interfaculty Program for Health Systems Improvement, and Managing Director of the Clinical Initiatives Center at the Advisory Board Company. He is co-author or editor of several publications including Health Care Policy, a textbook for physicians and medical students, and Uninsured in America: Life and Death in the Land of Opportunity. He serves on the staff at the Massachusetts General Hospital and faculty of Harvard Medical School. He earned his A.B., M.D., and M.P.P. (Masters in Public Policy) from Harvard University, and completed his clinical training at the University of Pennsylvania and the Massachusetts General Hospital.

Leora Horwitz, MD, MHS (Session 10, Learning Health System)

Leora Horwitz is an associate professor in the Departments of Population Health and Medicine at NYU Langone. She is the founding director of the Center for Healthcare Innovation and Delivery Science and the Division of Healthcare Delivery Science in the Department of Population Health. After receiving her AB degree magna cum laude in social studies from Harvard University, she earned her medical degree from Harvard Medical School and trained in internal medicine at Mount Sinai Hospital in New York City, where she also served as chief resident. She then received a master's degree in health services research while a Robert Wood Johnson Clinical Scholar at Yale School of Medicine, and spent seven years on the faculty at Yale School of Medicine. Her research initially focused on systems and practices intended to bridge gaps or discontinuities in care, but now she works more generally on healthcare redesign and learning health system transformation. Her work has been funded by the National Institute on Aging, the National Institute of Biomedical Imaging and Bioengineering, the Agency for Healthcare Research and Quality (AHRQ), the Centers for Medicare and Medicaid Services (CMS), the Robert Wood Johnson Foundation (RWJF), the John A. Hartford Foundation, the American Federation for Aging Research, the Patterson Family Trust, the Quad Family Foundation, and the Yale Center for Clinical Investigation.

David Levine, MD, MPH (Session 12, Home-Based Care)

David Levine, MD MPH MA, is a practicing general internist and clinician-investigator at Brigham Health and Harvard Medical School. He is active in clinical and translational research through a focus on optimizing quality time at home by shifting care home, decentralizing care, digital health technology, and measuring the quality and experience of health care. He sees his role as helping patients achieve the right care at the right time in the right place by designing, implementing, and evaluating innovative interaction spaces between a care team, technology, and a patient. David received his undergraduate degree from Pomona College in biology and politics. He earned his masters in teaching in special and secondary science education and served as a high school chemistry teacher and science department chair in Chicago Public Schools. He received his medical degree from Washington University in St Louis and completed his residency at New York University and Bellevue Hospital in internal medicine – primary care. He completed a general internal medicine fellowship at Brigham and Harvard Medical School and received his masters in public health at the Harvard School of Public Health.

Adam Myers, MD, MHCM, FACHE (Session 9, Population Health)

Dr. Myers started at the Cleveland Clinic in June of 2018 in a role new to the Clinic, which encompasses leadership of the ambulatory practices, post-acute medicine, ambulatory pharmacy, medical care@home, distance health, the ACO structure, three residency programs, the employee health plan, among many others. Prior to joining the clinic, Dr. Myers served as Chief Medical Officer and Chief Operating Officer of Texas Health Physicians Group. Before this, he served as CMO and SVP for Methodist Health System in Dallas and served on faculty in the University of Oklahoma Obstetrics and Gynecology department for 7 years teaching obstetrics. He has earned numerous professional credentials including the status of

Fellow with the American College of Healthcare Executives, The American Institute of Healthcare Quality and the American Association of Family Physicians. He holds additional board certification in healthcare quality management and patient safety, and is a certified professional in healthcare risk management. Myers received his undergraduate degree from Centenary College of Louisiana in Shreveport, where he graduated from Louisiana State University Medical Center. He also completed a Masters in Health Care Management from Harvard University.

Andrea W. Schwartz, MD, MPH (Session 11, Post-Acute Care and Geriatrics)

Andrea Wershof Schwartz, MD, MPH, is an Instructor of Medicine at Harvard Medical School, Staff Physician at the VA Boston Healthcare System and Educator in the VA's New England Geriatrics Research Education and Clinical Center (GRECC) in Massachusetts. As Site Director of VA Geriatrics for the Harvard Multicampus Geriatrics Fellowship Program, Dr. Schwartz introduced an innovative medical education curriculum into the fellowship, where she was awarded Outstanding Mentor of the Year in 2016. As a 2017-18 HMS Academy Medical Education Fellow, Dr. Schwartz is leading the development and integration of a longitudinal geriatrics curriculum in the new Pathways curriculum at Harvard Medical School. Dr. Schwartz is a sought after mentor and teacher for geriatric medicine fellows and internal medicine residents from Brigham and Women's Hospital, and leads geriatric educational sessions for interdisciplinary trainees at the VA, as well as a clinical practicum for the VA Geriatrics Scholars Program. Known for her creative and engaging presentations (including one comparing the rock band Van Halen's infamously detailed concert venue contracts to the importance of geriatrics principles), Dr. Schwartz draws inspiration from the intersections of medicine and the arts and humanities, and has published her original poetry and research in a number of leading journals.

Sarah Wakeman, MD, FASAM (Session 7, Behavioral Health)

Dr. Sarah Wakeman is the Medical Director for the Mass General Hospital Substance Use Disorder Initiative and an Assistant Professor of Medicine at Harvard Medical School. She is also the Medical Director of the Mass General Hospital Addiction Consult Team and a clinical lead of the Partners Healthcare Substance Use Disorder Initiative. She received her A.B. from Brown University and her M.D. from Brown Medical School. She completed residency training in internal medicine and served as Chief Medical Resident at Mass General Hospital. She is a diplomate of the American Board of Addiction Medicine. She is secretary for the Massachusetts Society of Addiction Medicine and chair of the policy committee. She previously served on Governor Baker's Opioid Addiction Working Group. Clinically she provides specialty addiction and general medical care in the inpatient and outpatient setting at Mass General Hospital and the Mass General Charlestown Health Center.

Krishna Yeshwant, MD, MBA (Session 14, Wrap Up)

Dr. Krishna Yeshwant, M.D., serves as the General Partner and Partner of GV. Dr. Yeshwant focuses on life sciences sector at GV and previously served as a Partner. He has been working with the firm since 2008. He is a physician, programmer and entrepreneur who has been working with GV since its inception. He first joined Google as part of the New Business Development Team. Prior to Google, Dr. Yeshwant helped start an electronic data interchange company and a network security company. He has worked with the technology transfer offices of MIT, Harvard and Massachusetts General Hospital. Dr. Yeshwant served as an Independent Director of Foundation Medicine, Inc. from October 19, 2011 to July 31, 2018. In 2000, he founded Recourse Technologies, Inc., a network security company that was acquired by Symantec Corporation (NASDAQ: SYMC) in 2002. Since 2009, Dr. Yeshwant has also been employed by Partners Healthcare, a not-for-profit health care system, as an internal medicine physician at Brigham and Women's Hospital. He co-authored the business plan for Diagnostics for All, which won both the Harvard Business School and MIT $100k business plan competitions. Dr. Yeshwant published several book chapters and journal articles in the field of computer guided surgery, has completed research in tissue engineering and has developed and licensed multiple surgical devices. Dr. Yeshwant holds an M.D. from Harvard Medical School, an M.B.A. degree from Harvard Business School and a BS degree in Computer Science from Stanford University. He completed his residency at Brigham and Women's Hospital where he continues to practice.

APPENDIX

A Guide to Case Study Analysis and Preparation

Case studies require careful preparation before class, which could easily take 60 minutes or more for a single case. The following is a list of steps to guide your case preparation:

1. First, rapidly read the assigned case and other materials to gain a general understanding of the organization, general situation and key issues presented in the case.

2. Carefully review the discussion questions provided for the session for guidance as to which issues require special attention. Please also refer to the assigned readings for insight into the key issues.

3. Carefully re-read the case, taking notes that sort information, facts, and observations. Use the discussion questions to guide your own thinking about the issues.

4. Formulate theories or hypotheses about what is going on as you read ("the organization is losing funding and is not sustainable"), modifying or rejecting them as new information surfaces ("Table 2 shows that funding is being awarded to organizations that have a more effective approach").

5. Analyze objective data in the case to build evidence for your hypotheses, "crunching" whatever numbers are available. It is very important to provide quantitative/empirical support wherever possible, particularly when exploring various hypotheses as to the nature and importance of certain phenomena. If the requisite data are not available in the case, precise descriptions of what data are missing often triggers ideas for making creative use of the information that is available.

6. It is usually helpful to identify trends relevant to the issues in a case, preferably if you can support this observation with a quantitative measurement. Some of these trends, often very important ones, may not be flagged in the text of the case but are in the Exhibits and Tables at the end of the case.

7. Prepare definitive conclusions and recommendations before you come to class concerning the issues raised in the discussion questions. It's OK if others in class disagree with you, or if your recommendations end up being in the minority of opinions. The goal of case discussion is not to be "right," but to share thoughtful insight to understand complex issues with few clearly right or wrong answers.

8. Bring your detailed notes with you to class to help guide your participation in class discussions.

Harvard Chan Policies and Expectations

Inclusivity Statement

Diversity and inclusiveness are fundamental to public health education and practice. It is a requirement that you have an open mind and respect differences of all kinds. I share responsibility with you for creating a learning climate that is hospitable to all perspectives and cultures; please contact me if you have any concerns or suggestions.

Academic Integrity

Each student in this course is expected to abide by the Harvard University and the Harvard. T.H. Chan School of Public Health School's standards of Academic Integrity. All work submitted to meet course requirements is expected to be a student's own work. In the preparation of work submitted to meet course requirements, students should always take great care to distinguish their own ideas and knowledge from information derived from sources.

Students must assume that collaboration in the completion of assignments is prohibited unless explicitly specified. Students must acknowledge any collaboration and its extent in all submitted work. This requirement applies to collaboration on editing as well as collaboration on substance.

Should academic misconduct occur, the student(s) may be subject to disciplinary action as outlined in the Student Handbook. See the Student Handbook for additional policies related to academic integrity and disciplinary actions.

Accommodations for Students with Disabilities
Harvard University provides academic accommodations to students with disabilities. Any requests for academic accommodations should ideally be made before the first week of the semester, except for unusual circumstances, so arrangements can be made. Students must register with the Local Disability Coordinator in the Office for Student Affairs to verify their eligibility for appropriate accommodations. Contact the OSA **studentaffairs@hsph.harvard.edu** in all cases, including temporary disabilities.

Course Evaluations
Constructive feedback from students is a valuable resource for improving teaching. The feedback should be specific, focused and respectful. It should also address aspects of the course and teaching that are positive as well as those which need improvement.

Completion of the evaluation is a requirement for each course. Your grade will not be available until you submit the evaluation. In addition, registration for future terms will be blocked until you have completed evaluations for courses in prior terms.

HPM 505 Writing Assignment Grading Rubric

Grading Criteria: Total 25 Points	**Deficient**	**Acceptable**	**Noteworthy**
1) Background/Motivation: Setting the stage **(5 points)**	Unclear, confusing or inadequate description of background or context of topic; unclear motivation. **(0-3 points)**	Describes background or context of topic and the relevant motivation within word/page limit. **(4 points)**	Articulate and concise description of the background or context and the relevant motivation. **(5 points)**
2) Analysis/Interpretation: Evaluation, integration, and synthesis of information **(7.5 points)**	Fails to consider separate perspectives. Incomplete or uneven discussion of data, with only obvious conclusions noted. **(0-5 points)**	Discussion beyond one perspective. Adequate discussion of data. Data interpreted correctly to reach logical conclusions. **(6-7 points)**	Discusses alternative perspectives in detail. Thorough discussion of implications with balanced critique. Well-reasoned and supported conclusions. **(7.5 points)**
3) Use of Evidence: Critical examination of data and evidence to support claims (*for interview assignment, critical analysis of interviewee data included)* **(7.5 points)**	Generally supports claims, but some evidence may not be relevant or sparse. Discussion of evidence is general, vague, or incorrectly documented. **(0-5 points)**	Selects relevant evidence to support claims. Discussion of documented sources adequately integrates information. **(6-7 points)**	Critically examines evidence to support claims. Discussion of evidence provides effective integration into logical ideas, with consistently correct conventions. **(7.5 points)**
4) Organization: Ideas are presented and organized cohesively and clearly. **(2.5 points)**	Ineffective structure and arrangement of thesis/ideas, lacking focus. Hierarchy of ideas is unclear with poor transitions. **(0-1 points)**	Structure organized around thesis/main ideas. Central argument is clear and supporting ideas are distinct. Adequate transitions between clear ideas. **(2 points)**	Readable and easy to follow structure and arrangement of thesis/ideas. Cohesive flow that convincingly develops central argument. Major and supporting ideas clearly presented. **(2.5 points)**
5) English Language Usage: Appropriate spelling, grammar, and diction comprise a persuasive, professional writing style. **(2.5 points)**	Unclear, confused, and/or unpersuasive articulation of ideas. Frequent or consistent improper English grammar, and/or diction. More than 3 spelling errors. **(0-1 points)**	Somewhat clear and persuasive articulation of ideas. Occasional improper English grammar and/or diction. 1-3 spelling errors. **(2 points)**	Perfectly clear and persuasive articulation of ideas. Proper English grammar and eloquent diction. No spelling errors. **(2.5 points)**

This rubric applies for both of the major writing assignments in the course (note that “evidence” includes information from the interview for the “Use of Evidence” component). Please direct any questions to the TA or Prof. Barnett.