Leading Health Care Organizations (HCMG 8600)

The Wharton School, University of Pennsylvania Spring 2024

Instructor:

Ingrid Nembhard, Ph.D., M.S. Fishman Family President's Distinguished Professor Professor of Health Care Management ingridn@wharton.upenn.edu Meeting times and location:

Class times: Mondays & Wednesdays, 1:45-3:15 PM

Classroom: Huntsman F55

Office hours: Wednesdays, 3:15-4:15 or by appointment

Teaching Assistant: Grace Park, PhD Student, glpark@wharton.upenn.edu

Course Description:

This course aims to improve enrollees' ability to effectively manage and lead health care organizations (HCOs, including hospitals, medical groups, insurers, biopharmaceutical firms, etc.). The course is designed to integrate previous course work and work experiences in general management, health care, and health policy to further participants' understanding of organizational, managerial, and strategic issues facing HCOs and the health care workforce. This is a management not economics course. The course will provide participants with a foundation for developing, implementing, and analyzing efforts to improve HCOs' performance. A major objective of the course is to sharpen the leadership, problem-solving, and presentation skills of those who aim to hold operational and strategic positions in health care organizations. Another objective is to introduce enrollees to leading HCOs. Through case studies, readings, in-class exercises and class discussions, participants will learn analytic frameworks, concepts, tools and skills necessary for leading and managing organizational learning, quality improvement, innovation, and overall performance in HCOs.

Intended Audience:

The course is for graduate students with an interest in the management of HCOs who have completed core courses in management, and thus are prepared to examine how multiple areas of management science are applied to solve problems in HCOs. Because we will cover major issues for various types of HCOs, this course is for those who seek a capstone experience (they want a working knowledge of management issues across health industries) as well as those who desire a survey of key subjects before taking additional classes in specific industries. Students who are not enrolled in a Wharton graduate program should request the instructor's permission to enroll. If space allows, senior undergraduates may enroll with permission. Space availability is not typically known until January. Auditors are not allowed.

Learning Objectives:

The objective of this course is to integrate previous course work in health care and in management to enhance problem-solving and analytical skills of students interested in careers and leadership in the health care industry.

By the conclusion of the course, participants will be able to:

- 1. identify and frame health care management problems;
- 2. define and choose among alternative strategies for addressing identified problems;
- 3. develop plans for implementing chosen strategies;
- 4. articulate methods of evaluating implemented strategies;
- 5. apply leadership and teamwork skills in the multidisciplinary (managerial and clinical) environment of health care; and
- 6. work respectfully and effectively in a diverse team to formulate and present an action plan.

Course Format:

Except for team presentation sessions and guest-speaker led sessions, each session will involve discussion of a case study, video, and/or assigned readings. There is usually one case and one reading. This class only works if students review the assigned material and come prepared to discuss. Prep questions are offered for each session to guide students in critical evaluation of material. Thinking about the questions in advance of class should enhance ability to contribute to class discussion. Class discussion will take place within the full group and in breakout groups. In all discussions, respectful communication is expected and required. We learn by considering diverse viewpoints and challenging our own and other's viewpoints. Although most (but not all) cases involve U.S. HCOs, the lessons apply broadly. Lessons for each session will be

summarized at the conclusion of each session via slides, which are posted on Canvas after class. All topics that we discuss are relevant for health care management (HCM) into the future, irrespective of whether the specific case we review is dated. An older case is only used if its lessons remain relevant. If a topic has been touched upon in HCMG 841, rest assured that we will approach it from a different angle in this class. The intent is to complement and build your angles of analysis.

For most sessions, I include a Supplemental Reading list. There is no expectation that you will read these. They are provided for those that want to go deeper on a topic and/or want to read original sources underlying some of our discussion.

Getting to Know Each Other – Lunch or Snack with Ingrid:

One of the joys of being an instructor is getting to know students and then watching them go into the world and make a positive difference. I hope that we can get to know each other as individuals and form our own community. Some of that will happen through our class discussions. I am also inviting you to join me for a group lunch (12-1:15 PM) or snack (3:30-4:30 PM) if you wish. This is completely optional. Feel absolutely no pressure to join. This is simply an invitation to connect if you have time and interest. There is no agenda for these chats. We'll seriously just chat. The lunch or snack sign-up sheet is posted on Canvas. I am offering four dates. If these dates are generally bad, tell me so we can identify better ones.

<u>Course Materials</u>: Cases and readings are available on Canvas under Study. Net and Course Reserve links, respectively. Links for Study. Net materials are also available on Syllabus/Assignments page. You must use Course Reserve page for other readings because the library is unable to embed a link on Canvas for copyrighted material. But they have posted the pdfs of each reading on our Canvas Course Reserve page and "tagged" them with session number to make life easier. Slides with session takeaways and other content will be posted under Files.

Course Requirements:		<u>Due Date</u>	% of Grade
Constructive class participation		Every class	25% (includes discussion board)
Midterm: Team case presentation		February 19 th & 21st	20%
	Written case analysis (1)	February 26 th at 1:45pm ET	20%
Final:	Team project presentation	April 15 th & 17 th	20%
	Written case analysis (2)	April 22 nd at 12pm ET	15%

Course Requirements in Detail:

- Class participation: Students are expected to attend every class and participate in our discussion. Credit is awarded based on participation not attendance. If a student must miss a class, s/he should notify Ingrid and Grace. If a student wishes to receive credit for the missed class, s/he should submit responses to the case questions (one paragraph per question) and a paragraph about each reading for that session that addresses how the author would respond to the case. This make-up assignment should be e-mailed to Grace by 1:45pm on the day of the missed class. No more than two make-up assignments may be submitted. Credit for make-ups is determined by quality of submission.
 - If you find it hard to speak in class and even if you do not, you may earn participation credit by identifying a current event related to the class session and posting a link to event/article on Canvas Discussions with your commentary about it by 12pm on the day of class. Depending on how many postings there are for a session, I may ask you to comment during class if an instructor-led session or at the start of the next class if a guest speaker-led session.
 - From time to time, I will post a question or idea on the Discussion Board and invite response. You can gain participation credit for thoughtful response.
 - All students are <u>expected to attend guest speaker-led sessions</u> and be engaging with speakers, all of whom are graciously taking the time to be with us and have a lot to share. <u>Missing these sessions is especially frowned upon</u>.
- Written case analysis (1) and (2): Without consulting with classmates and external sources (e.g., artificial intelligence, the internet, material from other classes or experiences), students will prepare two written case analyses in 4 pages maximum for analysis #1 and 3 pages maximum for analysis #2, excluding references and exhibits of financial analysis. Submissions should be 1.5-spaced with 1-inch margins and text in 12-point font. The first written analysis should be completed for our Session 12 case (TBD); it is due on February 26th at 1:45pm ET. We will discuss in class so assignments

must be submitted on time. The final written case analysis will be due April 22nd, five days after our last class. Questions to be answered in the case analysis will be posted the Wednesday before the assignment is due. Your write-up should address each question asked. Arguments made in your analyses should be justified with logic and/or evidence. You should reference materials from this class in your response (e.g., cases, readings, slides), integrating course content with case facts and your logic. Please upload your analysis to Assignments folder on Canvas.

- Team midterm case presentations: Each student will join one case analysis team (~7 members each). Teams will be formed to include students of diverse professional backgrounds. Each team will analyze and present an assigned case during Session 10 or 11. Each person is expected to contribute substantially to team presentation and be respectful to teammates. Failure to do so will be documented. Presentations, including question-and-answer, will be 20 minutes. This assignment provides students with the opportunity to collaborate, present their analysis, recommendations and implementation plans to an audience, and receive feedback on content and presentation style. Teams are expected to use and demonstrate the strategic problem-solving process discussed in class (Session 3) and should be prepared to answer questions during their presentation. In these sessions, participation credit is awarded for asking thoughtful questions of presenters as if an executive panel. All teams should email slides to Ingrid and Grace by 1pm on February 19th. If class size challenges our ability to maintain the parameters for this assignment, we will update.
- Team capstone project presentation: Teams will present an issue or dilemma currently faced by health care leaders or entrepreneurs of a real organization as the subject of their project. The issues/dilemmas presented will be proposed by students and finalized by class voting. Students join teams based on their topic preferences. The project should involve investigation of the chosen topic and reflect team analysis of the issue or dilemma and possible responses. Teams will present their project topic, analysis, and recommendation to the class in Session 23 or 24. Teams should be prepared to respond to audience questions. Non-presenting students will again serve as an executive panel.

<u>Wharton MBA Grading System</u>: Per the MBA Program requirements, grades will be based on the A, B, C, D, F system, with +/- distinctions, and the Class MBA grade-point average cannot exceed 3.50. Faculty are encouraged to align grades with performance distribution and use the whole distribution, giving grades of C+ and below when deserved.

<u>Personal technology use:</u> Please respect our time together. It can be tempting to engage in unrelated-to-class technology use and communication (text, etc.). That detracts from our class experience, your and classmates' learning, and our community: https://www.nytimes.com/2017/11/22/business/laptops-not-during-lecture-or-meeting.html. Phones, laptops, and other devices should only be used during class for class content. Violations of this policy will lead to a lower participation grade.

<u>Honor Code</u>: You may not talk or work with others on the written case analyses. You may not use material submitted for another class by you or another student, or seek information from the internet or other non-class sources to complete assignments, except to develop the team capstone project presentation. Plagiarism in any assignment is unacceptable. If there is evidence that these rules or the Penn-Wharton Honor Code are violated, the student will be referred to the Wharton honor committee. Whenever an assignment is uploaded to Canvas or presented in class, you are attesting that: "This assignment has been completed in accordance with the Wharton Honor Code. I have not given, received, or witnessed inappropriate exchange of information on this assignment, and I certify that this is my own original work in

accordance with all assignment guidelines."

Session	Topic, Goals & Cases (Abridged Format)		
	Introduction & Health Care in 2023 – The Year in Review Goals: Introduce the class (the people) and course – its content, its approach, and expectations. Consider trends in HCM and appreciate importance of integrative thinking in HCM		
	Models for Managing Health Care Delivery <u>Goals</u> : Understand, compare and evaluate traditional approaches to managing health care delivery. <u>Case</u> : Istituto Clinico Humanitas (A), 9-603-063		
	Operational Failures in Health Care & Strategic Problem-Solving Goals: Identify operational failures in HCOs. Use first steps in problem solving paradigm to address common failure. Identify first- vs. second-order problem-solving, and managerial implications Case: Patient Flow at Brigham and Women's Hospital (A), 608-171		
	Strategic Problem-Solving: The Implementation Challenge Goals: Use later steps in problem solving paradigm: select strategy and design implementation and evaluation plans. Identify pitfalls in implementation and underlying causes. Understand logic and practice of care paths. Differentiate programmed and non-programmed efforts. Case: Massachusetts General Hospital: CABG Surgery (A), 9-696-015		
. 5	The Cultural Challenge to Change in Health Care Goals: Appreciate organizational cultures in health care delivery organizations and their implications for management. Identify factors that determine, sustain, and influence culture and behavior in HCOs. Consider relationship of culture to current workforce happenings. Case: Readings instead.		
	Overcoming Challenges: Incentives, Motivation and Changing Professional Behavior Goals: Consider the role of incentives in shaping culture and behavior. Apply motivational theories to evaluate incentive programs in HCOs, including recent efforts like MACRA/MIPS. Case: Readings instead.		
	Strategies for Organizational Learning and Performance Improvement Goals: Discuss models of inter- and intra-organizational learning as approaches to improvement. Gain an appreciation for the concept and challenges of organizational learning, and becoming and maintaining learning health systems. Case: Collaborating to Improve, N9-608-054		
	Innovating in Health Care Delivery (Health Information Technology, Providers, and Insurers) Goals: Understand the types of innovations possible, and the diffusion of innovations in health care Understand IT and new roles. Discuss the notion of "disruptive innovation" to health care. Case: American Well: The Doctor Will E-See You Now, 510-061		
2/1/	Innovating and Improving Care for Underserved Populations Goal: Examine the business management strategies needed for vulnerable populations Case: CityBlock Health & Commonwealth Care Alliance		
	Midterm Oral Case Presentations: Managing Dilemmas Goals: Apply problem solving process and present strategic recommendations with implementation and evaluation plans. Practice presentation skills, manage questions and receive feedback. Case: To be assigned		
	Innovating in Health Care Delivery Globally Goals: Examine issues in HCM abroad. Consider the management and growth of health care providers and insurance in non-US settings. Discuss the globalization of health care delivery. Case: To be named and added to Study.Net one week prior		
	***Spring Break ***		

Session	Topic, Goals & Cases	
13 3/11	Case: None (no pre-work so you can enjoy every minute of spring break)	
14 3/13	Investments to Improve Health Care: A Look Inside Investor Strategy with a Focus on Technology Goals: Learn what investors see as their role in health care's future and needed transactions Guest: Jessica Federer, MPH, Board Member for Sage Therapeutics, Pluto, and Angelini Ventures; Former Bayer Chief Digital Officer; Health Tech Unicorn US CEO; Chair NYSE Women's Health Investor Summit; 2023 "Icon" by Rock Health	
15 3/18	The Future of Health Care: Value-based & Accountable Care Organizations * FINAL TEAM PLANNING Goals: Understand the world of ACOs and payment reform: the nuts and bolts. Assess the managerial implications of value-based and accountable care across health sector industries Case: Primer slides on ACOs and readings on Accountable Care Organizations (ACOs)	
16 3/20	Decisions and Trends in the Biopharmaceutical Industry Goals: Develop an understanding of strategic issues facing start-up bio-pharmaceutical firms, their options, and commercialization of their technology. Co-Instructor: Grace Park, Wharton PhD student, specializing in the Biopharmaceutical industry Case: Sirtris Pharmaceutical: Living Healthier, Longer, 9-808-112	
17 3/25	Goals: Understand current trends in the biopharmaceutical industry and extract lessons about sustaining a culture of innovation applicable across health care sectors Guest: Ankit Mahaderia, MD, MBA (Wharton), President and CEO, SperoTherapeutics; author of Quiet Leader, Loud Results (2022); previously Venture Partner at Atlas Venture; previously at Genentech, Vanda Pharmaceutical, the McKinsey & Company, Monitor Group, and U.S. Senate Health, Education, Labor, and Pensions committees	
18 3/27	The Future of Health Care: Technology with Artificial Intelligence to Improve Health Care Delivery Goals: Develop an understanding of the uses of artificial intelligence in health care across sub-sectors, the challenges and opportunities. Consider what excites and/or scares you about leading tech Guest: John Beadle, MS, Co-Founder and Managing Partner of Aegis Ventures (focused on health tech and AI); Architect of \$100M partnership with Northwell & Digital Consortium, speaker at SAIL	
19 4/1	The Future of Health Care: Organizing, Contracting, and Partnering Goals: Gain insights about value-based and accountable care, contracting, and partnerships from a former leader of an ACO successful in CMS' Shared Savings program, now leader in an insurer Guest: Sanjay Shetty, MD, MBA (Wharton), President, CenterWell at Humana, former President of Steward Health Care System	
20 4/3	Leadership: You are in Charge Now Going from Producer to Manager in Health Care Goal: Discuss the challenges of being a new manager – managing up, down and across the organization – when you're a clinician and when you're not Case: Alan Kendricks at Cardiology Associates, 9-407-067	
21 4/8	Leadership and Organizational Transformation Goals: Understand leadership, leadership theory and the job of a general manager in health care. Understand how an executive takes charge of and turns around a troubled organization. Case: Paul Levy: Taking Charge of the Beth Israel Deaconess Medical Center, 320703-HTM-ENG(video) Course Summary: Health Care Management in Review - Review course content; lingering questions	
22 4/10	Goals: Hear from a leader in the field about transforming care, serving the underserved, scaling an organization, closing health disparities, and achieving value in care. Guest: Christopher Chen, MD, CEO of ChenMed, Named to Fortune Magazine's "Change the World" list & "Best Primary Care System in the U.S."; recognized by White House & UK Health System.	
23 & 24 4/15 & 4/17	Team "Capstone" Project Presentation Goals: Demonstrate investigative, analytic, integrative and presentation skills around a managerial issue of your choice. Manage questions; communicate with leadership skill and capacity.	

<u>Case</u> : Your own
Final Written <u>Case</u> Analysis (2) Due on 4/22

Detailed Course Outline and Assignments

Session 1: Introduction & Health Care Management in 2023 – The Year in Review

Objective: Introduce the class (the people) and course – its content, its approach, and expectations.

Consider where we are in health care management right now.

Appreciate the importance of integrative thinking and trends in health care management.

Questions:

- What drew your attention as a top event or issue or theme for health care in 2023?
- What do you expect to be key themes in HCM during in 2024? Why?
- Is there anything that you wish would get more attention in 2024 but you think will not? Why not?

Read if time permits:

- 1. Asch D, Volpp KG. What business are we in? The emergence of health as the business of health care. New England Journal of Medicine 2012; 367:888-889.
- 2. Harrison M. 5 critical priorities for US health care system. Harvard Business Review 2021 (December 15).
- 3. Cutler DM. Health system change in the wake of COVID-19. JAMA Health Forum. 2023;4(10):e234355.

Session 2: Models for Managing Health Care Delivery

Understand, compare and evaluate traditional approaches to managing health care delivery. Objective:

Case: Istituto Clinico Humanitas (A) 9-603-063

Also read:

- Sikka R, Morath JM & Leape, L. The quadruple aim: Care, health, cost and meaning in work. BMJ Quality & Safety 2015 24(10): 608-610.
- Nundy S, Cooper LA, Mate KS. The quintuple aim for health care improvement: a new imperative to advance health equity. JAMA. 2022;327(6):521-522.

Questions:

- By what metrics, should we evaluate performance in health care delivery?
- How well is Istituto Clinico Humanitas performing with respect to these metrics?
- How do they realize this level of performance?
- How would you describe the Isituto model? Why doesn't every hospital follow the Istituto model?
- Should Istituto affiliate with the University of Milan? Why or why not?

Supplemental readings – if you want to know more behind our discussion:

- 4. Institute of Medicine. Crossing the Quality Chasm. Washington, DC: National Academy Press, 2001. Executive Summary, pp. 1-22. (http://books.nap.edu/openbook.php?record_id=10027&page=1; also in Canvas).
- 5. Nadler DA, Tushman ML. A model for diagnosing organizational behavior. Organizational Dynamics 1980, 9(2): 35.

Session 3: Operational Failures in Health Care & Strategic Problem Solving

Objective: Identify common operational failures in HCOs. Use first steps in problem solving paradigm: define problems and objectives, root causes analyses, set strategic alternatives, and comparative analysis; analyze tensions in problem solving. Identify when different approaches to problem solving (1st vs. 2nd order) are more useful.

Case:

Patient Flow at Brigham and Women's Hospital (A), 608-171

- Also read: Banaszak-Holl J, Nembhard IM et al. Leadership Framework for Action. In: Burns L, Weiner B, Bradley EH, eds. Health Care Management, 7th ed., Delmar. **Read section on Strategic Problem-solving, pp. 42-46
 - Gable M. 14 hospital leaders on the toughest thing about resuming elective surgeries. Becker's Hospital Review (4/23/2020)

Questions:

- What is the problem in this case? Do you think this is a big problem? Why or why not?
- Why do you think that several people didn't follow the official procedure for requesting ICU beds that day?
- What are options for improving patient flow to ICUs? Which of these options do you recommend and why?

- What do you think of the chain of emails, including Dr. Rogers' original email? If you were in the C-suite for the hospital, how would you respond to the situation?
- What do you surmise about patient flow for elective surgeries and otherwise since COVID-19?

Supplemental readings – if you want to know more behind our discussion:

- 1. Rakich et al., ch 10, pp. 383-406.
- 2. Kaplan RS, Norton DP. The balanced scorecard measures that drive performance. *Harvard Bus Rev* 1992; Jan-Feb:71-79.
- 3. Bohn R. Stop fighting fires. *Harvard Business Review* 2000,78(4): 82-91.

Session 4: Strategic Problem Solving: The Implementation Challenge

Objective: Use later steps in problem solving paradigm: select strategy and design implementation and evaluation plans. Identify common pitfalls in implementation in health care and underlying causes. Critique process specification as an approach to care management. Differentiate programmed and non-programmed efforts to organize care

<u>Case</u>: Massachusetts General Hospital: CABG Surgery (A), 9-696-015

<u>Also read</u>: - Klein, K. and Knight, A. Innovation Implementation: Overcoming the challenge. *Current Directions in Psychological Science 2005,* 14(5), 243-246.

- *if you have time for a light read. A somewhat famous piece that changed health care:* Gawande, A. The Checklist. The New Yorker, December 10, 2007.

Questions: - What are the primary challenges in improving operational processes in HCOs such as MGH?

- What implementation approach should Bohmer and Torchiana select? Where you would start, what resources would you use, what performance would you expect, and timeline you would follow, and how would you evaluate success? Why?
- Who benefits from well-implemented care paths? Who doesn't?
- How should MGH balance the tension between process standardization and process customization?
- In your past job(s), is there anything that you observed as effective for facilitating implementation?

<u>Supplemental readings – if you want to know more behind our discussion:</u>

- 1. Pfeffer, J., & Sutton, R. I. 2000. The Knowing-Doing Gap. Boston, MA: Harvard Business School Press. Chapter 1.
- 2. Alexander, JA et al. The science of quality improvement implementation: developing capacity to make a difference. *Medical Care* 2010, 48(12): 1-15.
- 3. Pascale RT, Sternin J. Your company's secret change agents. Harvard Business Review 2005, 83(5):72-81, 153.
- 4. Repenning, NP. A simulation-based approach to understanding the dynamics of innovation implementation. *Organization Science* 2002, 13(2): Read pp. 109-top of 114 and 124 (Implications) -126.
- 5. Damschroder LJ, Aron DC, Keith RE, Kirsh SR, Alexander JA, Lowery JC. Fostering implementation of health services research findings into practice: a consolidated framework for advancing implementation science. *Implementation Science* 2009, 4(1):50.
- 6. Huybrechts I, Declercq A, Verté E, Raeymaeckers P, Anthierens S. The building blocks of implementation frameworks and models in primary care: a narrative review. *Frontiers in Public Health*. 2021; 9:675171.
- 7. A tool for your future: Chaudoir SR, Dugan AG, Barr CH. Measuring factors affecting implementation of health innovations: a systematic review of structural, organizational, provider, patient, and innovation level measures. *Implementation Science*. 2013, 8(1):22.

Session 5: The Cultural Challenge to Change in Health Care

Objective: Appreciate the various organizational cultures in HCOs and their implications for management Identify factors that determine, sustain, and influence an organization's culture in HCOs Consider relationship of culture to current workforce happenings.

<u>Case</u>: Readings serve as our case.

Readings: - Schein E. Coming to a new awareness of organizational culture. Sloan Management Review 1984, 25(2):3-16.

- read enough to know culture types in HC and results: Nembhard IM, Singer SJ, Shortell SM, Rittenhouse D, Casalino LP. The cultural complexity of medical groups. Health Care Management Review 2012, 37(3):200-13.
- read enough to know results: Jacobs R, Mannion R, Davies HT, ... Walshe K. The relationship between organizational culture and performance in acute hospitals. Social Science & Medicine 2013, 76:115-25.
- Chatman J, Cha SE. 2003. Leading by leveraging culture. California Management Review, 45(4): 20-34.

- Questions: What is organizational culture? How do you know the culture of an organization?
 - What 3-5 questions would you ask to assess the culture of an HCO? Are these different from what you would ask in another industry?
 - What was the culture of the last organization in which you worked? What were the virtues of that culture? What were the challenges posed by that culture for organizational priorities (or should be priorities)?
 - Do you see or foresee change in the organizational culture of HCOs (providers, insurers, pharma)? Why?

Supplemental readings – you might find interesting on culture:

- 1. Scott TI, Mannion R, Davies HT, Marshall MN. Implementing culture change in health care: theory and practice. *International Journal for Quality in Health Care* 2003, 15(2):111-8.
- 2. Sull D, Sull C. How Companies Are Winning on Culture During COVID-19. MIT Sloan Management Review, Oct. 2020 https://sloanreview.mit.edu/article/how-companies-are-winning-on-culture-during-covid-19/
- 3. Barsade, S. and O'Neill, O. (2016, January-February). Manage Your Emotional Culture, Harvard Business Review.

Session 6: Overcoming Challenges: Incentives, Motivation and Changing Professional Behavior

Objective: Consider the role of incentives in shaping culture, motivation, and behavior. Evaluate the use of financial incentives (i.e. pay-for-performance) in healthcare. Apply motivational theories/concepts to develop improvement strategies and evaluate incentive programs in HCOs, including recent efforts like MACRA/MIPS.

Case: Readings serve as our case.

- Readings: read first few pages for history of incentive efforts in health care: Bridges to Excellence: Bringing Quality Health Care to Life, HBS case 9-604-030
 - -read for this one page for the latest clinician incentive program: Clough JD & Mcclellan M. Implementing MACRA: implications for physicians and for physician leadership. JAMA 2016;315(22):2397
 - -read these slides for latest requirements on MACRA/MIPS, QPP (located in Files) or watch the video
 - -read for the latest evidence on MIPS: Bond AM, Schpero WL, Casalino LP, Zhang M, Khullar D. Association Between Individual Primary Care Physician Merit-based Incentive Payment System Score and Measures of Process and Patient Outcomes. JAMA. 2022;328(21):2136–2146.
 - -read for motivational theory related to incentives: Herzberg F. One more time: How do you motivate employees? Harvard Business Rev 2003, 81(1): 86-96. (A classic HBR article) -
 - -read for modern take on motivation: Klinghoffer, D., & McCune, E. Why Microsoft measures employee thriving, not engagement. Harvard Business Review 2022 (June 24, Digital Article)

- Questions: What is your evaluation of BTE and MACRA? Are they improvements over past incentive programs? What metrics are you using to assess the success of incentive programs?
 - Is pay-for-performance a threat to medical professionalism? What does it imply about the future of the medical profession? If you are not in care delivery, does P4P work in your industry? What incentivizes?
 - In keeping with pay-for-performance, a CMS rule eliminates pay for healthcare acquired conditions (e.g., infections). What would Herzberg say about this incentive as a motivator compared to BTE and MACRA?
 - Consider incentives that you have faced in work. Why did they work positively or negatively? What does that mean for incentives in health care?

Supplemental readings – if you want to know more behind our discussion on incentives:

- 1. Kerr S. On the folly of rewarding, A while hoping for B. Academy of Management Executive, 1995: 9(1): 7-14
- 2. Frolich A, et al. A behavioral model of clinician responses to incentives to improve quality. *Health Policy* 2007, 80: 179–193.
- 3. Cassel CK, Jain SH. Assessing individual physician performance: Does measurement suppress motivation? *JAMA*. 2012, 307(24):2595-2596.
- 4. Gawande A. Annals of medicine: the bell curve: what happens when patients find out how good their doctors really are? *The New Yorker*. December 6, 2004.
- 5. Markovitz AA, Ryan AM. Pay-for-Performance: Disappointing Results or Masked Heterogeneity? *Medical Care Research and Review*. 2017;74(1):3-78.
- 6. Bassett-Jones, N., & Lloyd, G. C. (2005). Does Herzberg's motivation theory have staying power?. *Journal of Management Development* 2005; *24*(10), 929-943.

Session 7: Strategies for Organizational Learning and Performance Improvement in Health Care

Objective:

Discuss intra- and inter-organizational approaches to improving quality and performance in health care Discuss the application of management models drawn from production industries – e.g., Total Quality Management, Toyota Production System, Six Sigma - to health care delivery. Understand organizational learning, its implications for health care and becoming a learning system.

Case: Collaborating to Improve, 9-608-054

Also read:

Nembhard IM, et al. Why does the quality of health care continue to lag? Insights from management research. *Academy of Management Perspectives* 2009, 23(1): 24-42.

Questions:

- What are the strengths and weaknesses of the various approaches to improvement?
- What criteria should be used to make the choice of improvement strategy?
- Which strategy would you chose for Mandison and why?
- Why do results vary across institutions in a collaborative?
- If you were designing an inter-organizational learning strategy for your unit or organization, what three things would you insist upon for the group and its members?

Supplemental readings – if you want to know more behind our discussion:

- 1. Tucker AL, Edmondson, AC. Why hospitals don't learn from failures: Organizational and psychological dynamics that inhibit system change, *California Management Review* 2003, 45(2): 55-72.
- 2. Spear S. Fixing healthcare from the inside, today. Harvard Business Review, 2005, 83(12):78-91.
- 3. Nembhard IM and Tucker AL. Deliberate Learning to Improve Performance in Dynamic Service Settings: Evidence from Hospital Intensive Care Units. *Organization Science 2011, 22(4),* 907-922.
- 4. Nembhard IM. All Teach, All Learn, All Improve? The Effect of Interorganizational Learning on Performance Improvement. *Health Care Management Review 2012*, *37*(2), 154-164.
- 5. Senge P. The leader's new work: Building learning organizations. Sloan Management Review, 1990, 32(1): 7-23.
- 6. James BC, Savitz LA. How Intermountain trimmed health care costs through robust quality improvement efforts. Health Affairs 2011, 30(6):1185-91. Relatedly, Leonhardt D. Making Health Care Better. New York Times, Nov 3, 2009. (Intermountain Health Care) (http://www.nytimes.com/2009/11/08/magazine/08Healthcare-t.html)
- 7. Desai V. Learning through the distribution of failures within an organization: Evidence from heart bypass surgery performance. *Academy of Management Journal* 2015, 58(4):1032-50.
- 8. Garvin DA. et al. Is yours a learning organization? Harvard Business Review 2008 (Mar): 109-116.

Session 8: Innovating in Health Care Delivery (Insurers, Providers and Health Information Technology)

Objective: Understand IT in health care. Appreciate factors that affect the pace of diffusion of innovation in health care. Understand the types of innovations possible, and the diffusion of innovations in health care Discuss the application of the model of "disruptive innovation" to health care

American Well: The Doctor Will E-See You Now, 510-061 Case:

Also read: Magretta J. Why business models matter. Harvard Business Review, 2002, 80(5): 86-92.

Christensen CM et al. Will disruptive innovations cure health care? Harvard Business Rev 2000, 78(5):102-112. Glaser J. & Herath R. Preparing for digital transformation in healthcare. Healthcare Dive, 2023 (April 7).

- Questions: What is American Well's business model? (Note: this is denoted "A Classic" case by HBSP)
 - What value does Online Care offer to providers and insurers? What are the financial economics of the BCBS Hawaii deal for American Well and BCBS? Who wins?
 - If you were in the shoes of American Well management, would you pursue any of the next-generation options (products or markets) in 2010? What about now?
 - Is telehealth a disruptive innovation for healthcare? Why/why not? What are its potential and limits now?

<u>Supplemental readings – if you want to know more behind our discussion:</u>

- 1. Kenagy J et al. Service quality in health care. JAMA 1999, 281(7): 661-665.
- 2. Varkey P, Horne A, Bennet KE. Innovation in health care: a primer. American J Medical Quality 2008, 23(5):382-8.
- 3. Berwick D. Disseminating innovations in health care. JAMA 2003, 289(15):1969-1975.
- 4. Bates, D., Sheikh, A., and Asch, D. Innovative environments in health care: where and how new approaches to care are succeeding. Health Affairs 2017, 36(3): 400–407.
- 5. Leppänen, P., George, G., & Alexy, O. 2023. When do novel business models lead to high performance? A configurational approach to value drivers, competitive strategy, and firm environment. Academy of Management Journal 2023, 66(1), 164-194.
- 6. Karp, R. Gaining Organizational Adoption: Strategically Pacing the Position of Digital Innovations. Academy of Management Journal 2023, 66(3), 773-796.

Session 9: Innovating in Insurance and Care for Underserved Populations

Objective: Examine the business management strategies needed to care for vulnerable populations

Case:

- Cityblock website: https://www.cityblock.com/
- Cityblock restructures operations, cuts 12% of workforce as it plots plans for growth, profitability
- Commonwealth Care Alliance Case: Value-Based Care for Vulnerable Populations (see Files)

- Also read: Herzlinger R. Why innovation in health care is so hard. Harvard Business Review, 2006, 84(5): 58-66. Tikkanen, R.S., Schneider, E.C., Social Spending to Improve Population Health — Does the United States Spend as Wisely as Other Countries?. New England J Med 2020, 382, 885–887 Or Listen to 8-minute audio
 - Berkowitz SA, Gottlieb LM, Basu S. Financing health care system interventions addressing social risks. JAMA Health Forum. 2023;4(2):e225241.
 - -Glied S, D'Aunno T. Health systems and social services a bridge too far? JAMA Health Forum 2023; 48): e233445.

- Questions: Why have CityBlock and CCA targeted a population that most organizations try to avoid?
 - What is the rationale for each's approach to providing care and contracting for care delivery?
 - Evaluate their business and care models. What excites you? What worries you? How can it be improved? What role can/should its investors play in their future?

Supplemental readings – if you want to know more behind our discussion:

- 1. Bradley EH, Canavan M, Rogan E, Talbert-Slagle K, Ndumele C, Taylor L, Curry LA. Variation in health outcomes: the role of spending on social services, public health, and health care, 2000–09. Health Affairs 2016, 35(5):760-8.
- 2. Ndumele CD, Cohen MS, Cleary PD. Association of state access standards with accessibility to specialists for Medicaid managed care enrollees. JAMA Internal Medicine 2017, 177(10):1445-51.
- 3. Walsh, Kate. Equity Rx: Boston Medical Center's work to accelerate racial health justice. Frontiers of Health Services Management 2022, 39(2): 4-16.

Sessions 10 & 11: Midterm Oral Case Presentations

Objective: Apply strategic problem-solving framework and present strategic recommendation with implementation and

evaluation plans. Manage questions; communicate with leadership skill and capacity. Use evidence and persuasion to support recommendations. Practice presentation skills and receive feedback.

<u>Case</u>: To be assigned.

Optional: Preston P. Nonverbal communication: Do you really say what you mean? J Healthcare Mgmt 2005; 50:83-84.

Session 12: Innovating in Health Care Delivery Globally

***WRITTEN CASE DUE

<u>Objective</u>: Examine issues in health care management abroad. Consider the management and growth of health care providers and insurance in non-US settings. Discuss the globalization of health care delivery.

Case and Questions: To be named and added to Study. Net five days before due. See Canvas.

Session 13: Patient Experience (PX): Service Management in Health Care

<u>Objective</u>: Understand the concept of patient care experience and how it is measured. Appreciate what patient experience is, why it matters, the state of it, and current interventions. Consider what about your favorite model of customer experience can apply to healthcare

<u>Case</u>: None (no pre-work so you can enjoy every minute of spring break)

<u>Questions</u>: - Think of a time when you, a family member or friend interacted with health care providers. How would you characterize that experience? What went well? Not well?

- If you could have the health care experience of your hopes and dreams, with no constraints or limitations, what would that look like? What is YOUR design or innovation for accomplishing that?
- Are patient experience and patient satisfaction the same in your mind? Why/why not?
- Why should organizations worry about patient experience and/or satisfaction?
- Where do you have your favorite customer service experience? What from that experience could be transported to health care? Write your favorite service provider on board when you arrive in class.

Supplemental readings – if you want to know more behind our discussion:

- 1. Berwick D. What patient-centered should mean: confessions of an extremist. Health Affairs 2009; 28(4): 555-565.
- 2. NEJM Catalyst (Jan 1, 2017). What is Patient-Centered Care? NEJM Catalyst Innovations in Care Delivery.
- 3. Cleary P. Evolving concepts of patient-centered care and the assessment of patient care experiences: optimism and opposition. *Journal of Health Politics, Policy and Law* 2016, 41(4): 675-696.
- 4. Radick L. Improving the patient experience: every interaction matters. Healthcare Executive 2016; 31(6): 33-38
- 5. Warriach H, et al. Room for debate: hospitals that feel like hotels. The New York Times. August 22, 2016.
- 6. Gawande A. Big Med (Restaurant chains have managed to combine quality control, cost control, and innovation. Can health care?), *The New Yorker*, August 13, 2012
- 7. Ramdas, K., Teisberg, E., & Tucker, A. Four ways to reinvent service delivery. *Harvard Business Review, December* 2012.
- 8. van der Heijder R, Deichmann D. How design thinking is improving patient-caregiver conversations. HBR Web Article, November 3, 2017
- 9. Boissy A. Getting to Patient-Centered Care in a Post-Covid-19 Digital World. *NEJM Catalyst Innovations in Care Delivery*, July 14, 2020.

Session 14: Investments to Improve Health Care: A Look Inside Investor Strategy with a Focus on Technology

<u>Objective</u>: Learn what investing firms think is their role in improving health care, steps and transactions they have already taken and why, and what they view as opportunities and constraints on their prospects

Guest: Jessica Federer, MPH, Board Member for Sage Therapeutics, Pluto, and Angelini Ventures; Former Bayer Chief Digital Officer; Health Tech Unicorn US CEO; Chair NYSE Women's Health Investor Summit; 2023 "Icon" by Rock Health

<u>Read</u>: - Watch 3½ minute video: How Private Equity is Investing in Health Care. Kaiser Health News (10/28/22) https://canvas.upenn.edu/courses/1692666/pages/how-private-equity-is-investing-in-health-care Questions: - What questions do you have for Ms. Federer, given her background?

- What do you think of the role of investors in health care currently? What excites and worries you about their current role?
- In what would you like to see more investment in health care?
- Can you see yourself as an investor or working for an organization? Why/why not?

Session 15: The Future of Health Care: Value-based and Accountable Care Organizations

<u>Objective</u>: Understand the world of accountable care organizations (ACOs) and payment reform: the nuts and bolts.

Assess the managerial implications of value-based and accountable care across health sector industries.

Case: - Watch primer video on ACOs by Ingrid

Also read: - Porter M et al. Redefining competition in health care. Harvard Business Review 2004, 82(6): 64-76.

- -Burns L & Pauly MV. Accountable Care Organizations may have difficulty avoiding the failures of integrated delivery networks of the 1990s. *Health Affairs* 2012; 31(11): 2407-2416.
- Song Z. Taking account of accountable care. Health Services Research, 2021, 56, 573-577.
- -Navathe AS et al. Association of patient outcomes with bundled payments among hospitalized patients attributed to accountable care organizations. *JAMA Health Forum*, 2021; 2(8): e212131.
- Value-Based Payment As A Tool To Address Excess US Health Spending. *Health Affairs Research Brief*, December 1, 2022.DOI: 10.1377/hpb20221014.526546
- Optional: Porter ME & Kaplan R. How to pay for health care. Harvard Business Review, 2016, 94(7-8):88-98,

Questions:

- Do you think ACOs will address the current challenges in health care delivery? What are the strengths and weaknesses of ACOs as they are currently structured?
- What is required for successful ACOs? What are the three most important factors in your opinion?
- What impact do you expect ACOs/reform/value-based reimbursement to have on various healthcare sectors, including yours? What are the two most important things your sector should do to respond to ACOs? Value-based care?
- Are ACOs and other value-based reimbursement schemes sufficient to redefine competition in health care per Porter?
- Are ACOs essentially managed care return? Why or why not? What does healthcare look like in 2030?
- If you could, how would you redesign one aspect of the US health care system?

Session 16: Decisions in the Biopharmaceutical and Biotechnology Industries (Part 1)

Objective: Develop an understanding of strategic issues facing pharmaceutical firms.

Develop understanding of start-up biotechnology firms, their options and commercialization of their technology.

<u>Case</u>: Sirtris Pharmaceutical: Living Healthier, Longer, 9-808-112

<u>Questions</u>: - At the time Westphal joins Sirtris, what is your assessment of the odds that the company will ever generate substantial revenues? If you were Westphal, would you have left Polaris for Sirtris?

- Should Sirtris launch a SRT501 nutraceuticals business? Why or why not? If you were charged with launching this business, how would you proceed? Why?
- Should Sirtris diversify its technological base? If so, how by in-licensing a new compound or investing in the development of SIRT2-7?
- Should Sirtris do the deal with the pharmaceutical company? Why or why not? If you do recommend a deal, which equity stake (20% or 51%) would you prefer and why?
- What lessons have you derived from Sirtris's experience? For any who have worked in biotechnology or medical device industry, are lessons from Sirtris similar to your own observations? What's different?

Session 17: Decisions in the Biopharmaceutical and Biotechnology Industries (Part 2)

<u>Objective</u>: Understand current trends in the biopharmaceutical industry and extract lessons about sustaining a culture of innovation applicable across health care sectors

Consider the connections (real/potential) between biopharma and other health sectors (providers, insurers)

Guest:

Ankit Mahaderia, MD, MBA (Wharton), President and CEO, SperoTherapeutics; author of Quiet Leader, Loud Results (2022); previously Venture Partner in the life sciences group at Atlas Venture; previously at Genentech, Vanda Pharmaceutical, the McKinsey & Company, Monitor Group, and health policy with U.S. Senate Health, Education, Labor, and Pensions committees

Questions: - What do you want to know about biopharmaceutical business management?

- What do you want to discuss about creating a culture of innovation and leading in any organization?

Reading:

- For 2023 industry overview: CFRA Industry Surveys: Pharmaceuticals, October 2023 (via Penn NetAdvantage)
- Melchner von Dydiowa, G., van Deventer, S., & Couto, D. S. How large pharma impacts biotechnology startup success. *Nature Biotechnology* 2021, *39*(3), 266-269.
- Redit, C. Pharma backs off biotech acquisitions. Nature Biotechnology 2022, 40, 1546-1550.

Supplemental readings – if you want to know more behind our discussion:

- 1. Congressional Budget Office. Research and Development in the Pharmaceutical Industry, April 2021
- 2. Hoang HA & Rothaermel FT. Leveraging internal and external experience: exploration, exploitation, and R&D project performance. *Strategic Management Journal 2010, 31*(7), 734-758.
- 3. Carden C. The brave new world of valuing life sciences and healthcare enterprises. *Business Horizons* 2010, 53: 183-197.
- 4. Stuart TE et al. Interorganizational endorsements and the performance of entrepreneurial ventures. *Administrative Science Quarterly* 1999, 44(2): 315-349.
- 5. Tollman P, Morieux, Y, Murphy JK, & Schulze U. Identifying R&D outliers. *Nature Reviews Drug Discovery* 2011, 10(9): 653-654.
- 6. Aspinall, M. G., & Hamermesh, R. G. Realizing the promise of personalized medicine. *Harvard Business Review* 2007, *85*(10), 108.

Session 18: The Future of Health Care: Technology with Artificial Intelligence to Improve Health Care Delivery (Part 1)

<u>Objective</u>: Develop an understanding of the uses of artificial intelligence in health care across sub-sectors, the challenges and opportunities. Examine the role of investors and partnerships in this space. Consider what excites and/or scares you about the evolving role of technology and being a leader in this environment

Guests: John Beadle, MS, Co-Founder and Managing Partner of Aegis Ventures (focused on health tech and AI);
Architect of \$100M partnership with Northwell & Digital Consortium, speaker at SAIL

Sijia Yu, MBA (Wharton) Head of Business Development at Aegis Ventures

<u>Case</u>: None

Read: - Ne

- New York's largest health system is pushing into generative AI with help from a former Amazon exec and a \$100 million venture partnership
- -Aegis Ventures to Expand Work With Northwell Into Digital Consortium
- Sahni NR, Carrus B. Artificial Intelligence in U.S. health care delivery. N Engl J Med. 2023 Jul 27;389(4):348-358.
- Mello MM, Shah NH, Char DS. President Biden's Executive Order on Artificial Intelligence—Implications for Health Care Organizations. *JAMA*. Published online November 30, 2023. doi:10.1001/jama.2023.25051
- Optional: Listen to <u>Conversations on Health Care Podcast: The Doctor & ChatGPT Will See You Now: Is</u> This the Future? Guest: Cris Ross (Chief Information Officer, Mayo Clinic), June 8, 2023

- Questions: What are three questions that we should be asking about artificial intelligence in health care?
 - What roles should investors and partnerships play in health care? What might they bring, good and bad?
 - What questions do you have for Mr. Beadle?
 - Is artificial intelligence a disruptive innovation?
 - What is your favorite application of artificial intelligence or firm in health care if you have one?
 - What excites and/or scares you about current technology developments?

Session 19: The Future of Health Care: Organizing, Contracting, and Partnering

Objective: Gain insights about value-based and accountable care, contracting, and partnerships from a former leader of an ACO successful in CMS' Shared Savings program and now leader for care in an insurer

Guest: Sanjay Shetty, MD, MBA (Wharton), President, CenterWell at Humana, former President of Steward Health **Care System**

Reading: None.

- Question: What do you want to know about leading an organization that is highly successful in a value-based world?
 - What do you want to know about how providers or insurers think about accountable care, value and payment?
 - What do you anticipate is critical during contracting, negotiations, and partnering for ACOs?

Session 20: Leadership: You are in Charge Now - - Going from Producer to Manager in Health Care

Objective: Discuss the challenges of being a new manager – managing up, down and across the organization, when you're a clinician and when you're not

Case: Alan Kendricks at Cardiology Associates (9-407-067)

- Also read: Gabarro J, Kotter, J. Managing your boss. Harvard Business Review, 2005, 83(1): 92-99.
 - Drucker P. Managing oneself. Harvard Business Review, 1999, 65-74.

Questions: - How well has Alan Kendricks done in his new job? Was he a good choice for the position?

- What changes is Kendricks trying to make and why?
- What obstacles is he running into in making these changes? How do you categorize them?
- How can he best overcome these obstacles?
- In what order should Alan address the challenges/obstacles and why?

Supplemental readings – if you want to know more behind our discussion:

- 1. Heifetz, RA, M Linsky. A survival guide for leaders. Harvard Business Review, June 2002, 65-74.
- 2. Schaeffer LD. 2002. The leadership journey. Harvard Business Review, 80(10): 42-47.
- 3. Weeks H. Taking the stress out of stressful conversations. Harvard Business Review 2001, 79(7): 112-120.
- 4. Interview: Knowledge @ Wharton. "Physician and Administrator: How Surgeon Larry Kaiser Navigates Two Different Worlds." March 13, 2008. The Wharton School of the University of Pennsylvania.
- 5. Daake D, Anthony W. 2000. Understanding stakeholder power and influence gaps in a health care organization: An empirical study. Health Care Management Review, 25(3): 94-107.
- 6. Pfeffer J. 1992. Understanding power in organizations. California Management Review, 34(2): 29-50.

Session 21: **Leadership and Organizational Transformation**

Understand leadership, leadership theory, and the job of a general manager in a hospital. Objective:

Understand how a talented executive takes charge of and turns around a troubled organization.

<u>Case</u>: Paul Levy: Taking Charge of the Beth Israel Deaconess Medical Center, 320703-HTM-ENG(video)

**NOTE: The is a multi-media case. This session will only make sense if you view the multi-media case in advance. To access the case, go to https://hbsp.harvard.edu/import/1127002 and register for the case. This different page is designed to check whether your current browser settings and plugins meet minimum requirements to run HBS Multimedia Cases.

Read: Kotter J. Leading change: Why transformation efforts fail. Harvard Business Review 2007(Jan): 97-103.

Questions:

- How would you describe the situation Levy inherited at the BIDMC? What challenges did he face? Why did previous turnaround efforts fail?
- How did Levy get started in his new job? In particular, what were his objectives and what did he accomplish: prior to his first day at work? on his first day? during his first week?
- What (if anything) was distinctive about the way Levy formulated, announced, and implemented the restructuring plan? What is your evaluation of his approach to staffing the task forces?
- How did Levy tackle the problem of the BIDMC's "curious inability to decide?"
- In describing his leadership style, Levy speaks of the "CEO as teacher." How has he defined that role? Why has he chosen to focus on it? What skills does it require? In what settings is it likely to be useful?
- What is your evaluation of Levy's leadership style? What lessons about leading organizational transformation do you derive from Levy?
- What do you notice about his communications to the organization and others?

Supplemental readings – if you want to know more behind our discussion:

- 1. Cialdini RB. Harnessing the science of persuasion. Harvard Business Review 2001, 79(9): 72-81.
- 2. Kotter J. 2001. What leaders really do. Harvard Business Review, 79(11): 85-96. (A Best of HBR)
- 3. Starr, D. (Oct 26, 2020). What Should Crisis Leadership Look Like? *The New Yorker*.
- 4. The VA: Young GJ. Managing organizational transformations: lessons from the Veterans Health Administration. *California Management Review* 2000, 43(1): 66-82.
- 5. Lukas CV, Holmes SK, Cohen AB, Restuccia J, Cramer IE, Shwartz M, Charns MP. Transformational change in health care systems: an organizational model. *Health Care Management Review* 2007 32(4):309-20.

Session 22: Leadership and Organizational Transformation: The Finale

<u>Objective</u>: Hear from a leader in the field about transforming care, serving the underserved, scaling an organization,

closing health disparities, and achieving value in care.

Guest: Christopher Chen, MD, CEO of ChenMed, Named to Fortune Magazine's "Change the World" list & "Best

Primary Care System in the U.S."; recognized by White House & UK Health System

Questions: Everything is on the table for this finale on leading health care organizations. What do you want to know

from a successful leader in health care?

Sessions 23 & 24: Team "Capstone" Project Presentations

<u>Objective</u>: Demonstrate investigative, analytic, integrative and presentation skills around a managerial issue of your choice. Manage questions; communicate with leadership skill and capacity.

Case: Your own

Supplemental readings – a few things to keep in mind as you go forward:

1. Ramanujam R, Rousseau DM. 2006. The challenges are organizational not just clinical. *Journal of Organizational Behavior*, 27: 811-827.

- 2. Gawande, A. / TED Talks (2012). How do we heal medicine? [Video File]. Retrieved from: https://www.ted.com/talks/atul_gawande_how_do_we_heal_medicine/transcript?language=en
- 3. Berwick DM. Escape Fire: Lessons for the future of health care. The Commonwealth Fund, 2003
- 4. Berwick DM. To Isaiah. JAMA 2012, 307(24):2597-2599.

Final Written Case Analysis (2) Due: April 22 at NOON ET but may be submitted earlier