B8128 Healthcare Investment and Entrepreneurship – HCIT & Services - Spring 2019 (A-Term); M 12:30-3:45pm. Room. Warren 311

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Course Overview

This course analyzes the unique characteristics and strategies of investing in the healthcare sector from the perspectives of venture capital firms investing in early-stage healthcare enterprises and private equity firms seeking to build value-creating healthcare platforms, as well as entrepreneurs creating and managing such business entities.

The course is focused on innovative business models of early to mid-stage healthcare services companies (payers, providers, HCIT firms) that improve quality of patient care, lower costs, and facilitate access to such services. It considers how investors and entrepreneurs can assess, value and manage the inherent risks to succeed in this large, complex, and dynamic sector. Sectors that are highly fragmented, complex, and inefficient such as healthcare create attractive business and investment opportunities for sophisticated investors and entrepreneurs.

The course will also highlight innovations in the HCIT field, how payers, providers, and manufacturers are applying such technologies, unique environmental, competitive and regulatory issues healthcare entrepreneurs face in this space, and key investment considerations. This course will address these issues through a mixture of lectures, case studies, and guest speakers (investors and entrepreneurs) from the healthcare sector.

Areas to be discussed in this course include:

- Unique challenges in assessing risk, valuing and investing in the healthcare services and information technology sectors (government regulation, pricing/third-party reimbursement, utilization trends, cost-effectiveness analyses, provider and consumer adoption of new technology, public policy, etc.).
- Unique issues confronting entrepreneurs in this space including creating a sustainable business model, defining the market and its competitors, scale-up opportunities, constructing the Board & management team, securing funding sources, and exit options.
- Review of VC/PE firms’ approach and strategies in sourcing, evaluating and executing on attractive healthcare investment opportunities.
- Understanding the different markets for HCIT product and services, including consumer engagement, aging-in-place, and care coordination/population health.
- How VC and PE firms approach risk differently--depending on where they are investing along the company maturity continuum.
- Assessing winners and losers in this space, with case studies to illustrate examples of both.
**Connection to the Core**

The learning in this course will utilize, build on and extend concepts covered in the following core courses:

<table>
<thead>
<tr>
<th>Core Course</th>
<th>Connection with Core</th>
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<tbody>
<tr>
<td>Corporate Finance</td>
<td>1. Time Value of Money</td>
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<td>2. Risk</td>
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<td>3. Firm Valuation Model</td>
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<td>Decision Models</td>
<td>1. Decision Making Under Uncertainty and Risk</td>
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<td>2. Sensitivity Analysis</td>
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<td>3. Modeling Competitive Effects</td>
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<td>4. Modeling in Practice</td>
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<tr>
<td>Managerial Economics</td>
<td>1. Analyzing Complex Decision-making Under Uncertainty</td>
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<td>Managerial Statistics</td>
<td>1. Modeling Uncertainty: Random Variables, Distributions,</td>
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<td>Making Decisions Under Uncertainty</td>
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<tr>
<td>Marketing Strategy</td>
<td>1. Company analysis</td>
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<td></td>
<td>2. Competitive Analysis</td>
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<td>3. Market Penetration and Marketing Strategy</td>
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**Format and Approach**

This course will present a program that is intellectually stimulating and challenging in a short time frame. Class participation will be critical for the students, and we will constantly seek to relate the information and ideas discussed in the classroom to issues currently confronting companies, investors and entrepreneurs in this sector. **Understanding of, or experience in, the healthcare sector will be highly valuable. Students need to attend the first class session to understand material covered later in the course.**

**Materials, Classroom, Ground Rules**

Certain readings will be distributed in class or posted on Canvas. We will try to have lecture notes available in advance of each class (subject to guest speaker preference). It is important that you attend all classes, arrive on time, and give speakers and your fellow classmates your full attention. If you cannot attend a specific class or must arrive late let Prof. Mehlman or Tamburri know in advance by email. **Please refrain from using laptops, IPads, cellphones, etc. in class.**
Course Requirements and Evaluation

Class Participation (25%): It is important that students take an active role in classroom activities and discussions and come fully prepared. The class participation grade will reflect class attendance and the quality of the student’s involvement in class activities and discussions.

Midterm Assignment (25%): For a mid-term writing assignment, students will be given an investment case study or questions for their written analysis and recommendations. This 2-3-page paper (excluding exhibits) should summarize your recommendations to a decision-maker involved in the situation and your analysis supporting that recommendation.

Final Paper/Analysis (50%): The course will include a final written analysis on an investment case study or questions pertaining to the course material. The paper will be approximately 3-4 pages, excluding exhibits.

Class Schedule and Topics

The following is the schedule of topics (Note: specific dates, topics and speakers will vary based on availability).

February 1st  
Course Introduction, Industry Overview & Investor Considerations
- Review course syllabus, class sessions, and course requirements/evaluation.
- Overview of the healthcare delivery system in the U.S., including funds flow, allocation of healthcare spend, and key players and their incentives
- Unique challenges of investing in healthcare sector (government regulation, pricing/third-party reimbursement, utilization trends, cost-effectiveness analyses, physician & consumer adoption of new technology, public policy/healthcare reform, etc.)
- Spectrum of healthcare venture capital and private equity investors -- overview of VC/PE firms’ approach and strategies in identifying and evaluating attractive healthcare investment opportunities, and key investment themes.
- Speakers: Ezra Mehlman and Dave Tamburri

February 4th  
Healthcare PE/VC Deep Dive & Deal Evaluation Framework
1st Half (1H): Healthcare PE/VC Deep Dive
- Identification and review of key sub-sectors within healthcare services and HCIT space.
- Evaluation of key investment theses within healthcare services and HCIT
- Discussion of M&A and financing activity
- Guest Speakers: Joshua Weisbrod and Nirad Jain, Partners, Bain Consulting
2nd Half (2H): Deal Evaluation Framework
- Views on risk assessment and valuation in the healthcare sector, including pragmatic approach to “thinking like an investor”.
- Evaluative framework for sourcing and assessing deals, including understanding market risk, product/technology risk, and execution risk.
• Speakers: Ezra Mehlman and Dave Tamburri

Feb. 11th  Buyout Perspective and Valuation & Terms Deep Dive  
1H: Buyout Perspective: Summit Partners  
• This class will feature the perspective of one of the most successful healthcare investors.  
• Deal sourcing, key triage factors, what makes an attractive buyout/growth equity candidate?  
• Due diligence: business plan review, site visit, references, market and competitive analysis, legal/regulatory, other risk factors, etc.  
• Financial analysis, valuation methodologies, term sheet.  
• What makes a good healthcare PE professional?  
• Guest speaker: Darren Black, Managing Director, Summit Partners  
2H: Valuation and Terms  
• Valuing healthcare services/HCIT companies.  
• Venture math deep dive and valuation assessment  
• Returns modeling and exit options (investor perspective)  
• Key terms: economic and control  
• Midterm is assigned  
• Speakers: Ezra Mehlman and Dave Tamburri

Feb. 18th  VC/Entrepreneur Perspective & “Day in the Life” of a PE Professional  
Part I: VC/Growth Equity Perspective: Bijan Salehizadeh  
• NaviMed Capital at a glance.  
• Idiosyncratic considerations that one must weigh when evaluating opportunities in HCIT, healthcare services, and medical devices  
• Evaluating market risk, product risk, and execution risk in early stage and growth equity investments.  
• Reflections on the evolving healthcare services and healthcare IT investment environment.  
• Guest speaker: Bijan Salehizadeh, Managing Partner, NaviMed Capital  
Part II: Entrepreneur Perspective: Mark McAdoo  
• Perspective of winning strategies and common pitfalls of healthcare start-ups in this space, including examples of each.  
• Entrepreneur perspective: building, scaling and exiting a growth-stage HCIT company.  
• Review midterm assignment; preview final assignment.  
• Guest speaker: Mark McAdoo (CBS ’97), CEO, HealthQx (sold to Change Healthcare)  
Part III: “Day in the Life” of a PE Professional  
• Daily activities of a healthcare investment professional  
• Tips on launching a career in PE/VC  
• Most important attributes of a PE/VC professional
Guest speaker: Elizabeth Colonna (CBS ’17), Senior Associate, Health Enterprise Partners

Midterm is due at 11:59 PM on February 18th

Are you going to sketch out 3 bullet points? Might be good as a guidepost so it maps to the syllabus and also provides her a framework

Feb. 25th Strategic Investing Perspective and Case Study: Privia Health

1H: Investment Case Study: Privia Health
- Using the risk framework introduced in the prior session, we will evaluate Privia Health. Management will be present for the sessions.
- Market/product overview, value proposition, competition, go-to-market strategy, capital formation, scale-up/growth strategy, etc.
- Key opportunities and challenges, and lessons learned (entrepreneur perspective).
- Investment thesis, risk and valuation assessment, exit options (investor perspective)
- Guest speaker: Jeff Butler, Founder Privia Health

2H: Strategic Investing Perspective: Optum Ventures
- Optum Ventures at a glance
- The role of corporate venture capital within HCIT
- Navigating the customer-investor divide
- Models of being an effective strategic partner
- Transitioning from an entrepreneur to an investor
- Guest Speaker: AG Breitenstein, Partner, Optum Ventures

March 4th Fund Dynamics, Board Membership & Course Wrap-Up
- This class, our final one, will synthesize the core investing concepts introduced from guest speakers and prior lecture into a core set of lessons learned.
- Fund dynamics and how they inform investing strategy
- Various forms of negotiation: intra-fund, inter-fund, and with entrepreneurs
- What makes a good healthcare PE professional?
- Capstone Case Study: DecisioMatrix
- Final Assigned. Final due at 11:59 PM on March 18th.
- Speakers: Ezra Mehlman and Dave Tamburri