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# Winter Leadership Conference

## **Transforming Health Care: The Business Impact of AI**

*Hosted by Health Care & Emerging  
Industries and Technology Committees*

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# Transforming Healthcare

## The Business Impact of AI

ABI Winter Leadership Conference  
December 13, 2024



## Panelists



Patrick Darby

**Patrick Darby**  
**Encompass Health**

Patrick is Executive Vice President, General Counsel, and Corporate Secretary of Encompass Health Corporation (NYSE: EHC), which owns and operates 166 inpatient rehabilitation hospitals in 38 states and Puerto Rico. Formerly with Bradley Arant Boult Cummings in Birmingham, Alabama, he is a Fellow in the American College of Bankruptcy.



Otis Hendershott

**Otis Hendershott**  
**VMG Health**

Otis serves as Chief Data and Technology Officer for VMG Health and is accountable for overall technology/data strategy and execution for the enterprise. Otis joined VMG Health from United Health Group's Optum Technology division. His expertise encompasses a wide spectrum of healthcare domains, including payor services, care delivery, pharmacy benefit management, complex conditions management, value-based care, electronic medical record implementations, and utilization management.



Barbara Bennett

**Barbara Bennett**  
**Frost Brown Todd**

Barbara is a nationally recognized health care, data privacy and AI governance attorney who has been involved since the beginning at the intersection of Internet technology and the law. She holds the AI Governance Professional (AIGP) certification from the International Association of Privacy Professionals. She has been a successful senior partner in a top-ten global law firm, as well as having more than a decade of in-house legal and business experience, including as General Counsel.



Clare Moylan

**Clare Moylan (Moderator)**  
**Gibbins Advisors**

Clare is a co-founder and Principal of Gibbins Advisors, a consulting and restructuring advisory firm that specializes in the middle market healthcare sector. Clare brings ~20 years of experience in healthcare spanning turnaround and restructuring, operations management, strategic planning, business analysis and performance improvement consulting. She is skilled at taking complex problems, bringing clarity to the key issues, and supporting multiple layers of stakeholders to work toward an agreed solution.

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1. Understanding AI in Healthcare
2. Business Implications
3. Spotting Key Risks
4. Legal Considerations
5. Building Effective Governance

## 1. Understanding AI in Healthcare

## What is AI?

Artificial Intelligence (AI) refers to the simulation of human intelligence processes by machines, particularly computer systems.

### These processes include

- learning (acquiring information and rules for using it),
- reasoning (using rules to reach approximate or definite conclusions), and
- self-correction.

### Augmented Intelligence

- Augmented intelligence (AI) is a complement—not a replacement—to human intelligence.
- It's about helping humans become faster and smarter at the tasks they're performing.

While AI seeks to replicate human intelligence autonomously, Augmented Intelligence aims to augment human abilities, fostering a collaborative interaction between humans and machines.

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## Key Components of AI

### Machine Learning

Algorithms that enable computers to learn from and make predictions or decisions based on data.

### Natural Language Processing (NLP)

The ability of machines to understand and interpret human language.

### Human-in-the-loop (chatbot style)

Involves human feedback to train and refine the AI model

### Non-probabilistic models

Operate on predefined rules and logic rather than probabilistic methods

### Generative AI Based on Large Language Models (LLM)

Trained on vast datasets, often including text from diverse sources

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# Machine Learning

- > Machine Learning (ML) is a subset of artificial intelligence that enables systems to **learn and improve from experience without being explicitly programmed.**
- > It focuses on the development of algorithms that can process data, identify patterns, and make decisions with minimal human intervention.
- > Machine learning is heavily focused on **predicting future outcomes.**



## Supervised Learning

Predicting outcomes by using existing data **where the outcome for each event is already known**



## Unsupervised Learning

Predicting outcomes by analyzing large data sets **where the outcome for events are not known**



## Reinforcement Learning (RL)

A machine learning technique that trains software to make decisions to achieve the most optimal results. Rewards desired behaviors and punishes undesired ones

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# Machine Learning – Types & Examples

## Supervised Learning

- > Supervised learning involves training algorithms on labeled data, where the **desired output is known**

Examples:

- Geisinger Health System **predicts which patients are at high risk of developing chronic conditions** such as diabetes and heart disease
- UnitedHealthcare uses these models to **detect fraudulent claims** by analyzing patterns in billing data
- Johns Hopkins **predicts patient admission rates and staffing needs**
- Mass General **predicts patient flow and resource needs** in the ER

## Unsupervised Learning

- > The model **identifies patterns in unlabeled data**
  - > discovering new disease patterns or diagnostic results
  - > Analyzing large claims databases to identify potential anomalous billing and coding patterns

Examples:

- Kaiser Permanente clusters patient data to **identify distinct groups** based on demographics, medical history and health behaviors
- Cleveland Clinic uses this to **detect anomalies in patient health records** and clinical data that may indicate potential medical errors

## Reinforcement Learning

- > RL involves training an agent to make decisions by rewarding desired actions (**trial and error**).
- > In healthcare, RL is used to optimize complex operational processes, improving efficiency and patient outcomes.

Examples:

- RL **optimizes the allocation of hospital beds** based on patient needs, admission rates, and length of stay predictions.
- Cleveland Clinic uses RL to **optimize patient appointment scheduling**, balancing clinician availability and patient preferences

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# Natural Language Processing (NLP)

- › Natural Language Processing (NLP) is a branch of AI that enables machines to **understand, interpret, and generate human language.**

Examples:

- Automates administrative tasks such as appointment scheduling, insurance verification, and follow-up communications
- Analyzes clinical documents and assigns accurate medical codes for billing purposes
- Analyzes patient feedback from surveys, social media and other sources to gauge sentiment and identify areas for improvement
- Matches patients with appropriate clinical trials based on their medical history and current condition
- Facilitates the exchange of health information between different systems by standardizing and interpreting unstructured data

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# Human-in-the-Loop (Chatbot-style AI)

- › **Involves human feedback to train and refine the AI model**
- › Learns from interactions to improve over time
- › Designed to optimize specific outcomes through continuous feedback loops

Examples:

- Provides tailored health advice and answers specific patient questions
- Delivers personalized mental health support and therapy recommendations
- Assists in medical training by simulating patient interactions
- Human involvement helps ensure the AI aligns with ethical and professional standards

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## Non-probabilistic (Rule-based)

- › **Operate on predefined rules and logic rather than probabilistic methods**
- › Produces consistent outcomes based on the given inputs and rules
- › Easier to understand and interpret due to clear decision-making processes

Examples:

- SEER\*DMS (Surveillance, Epidemiology, and End Results Data Management System) uses predefined rules to **categorize cancer cases** and support epidemiological research
- A Pharm model uses rule-based system that **alerts healthcare providers to potential drug-drug interactions** based on a comprehensive database
- **Compliance risk** software may look at PEPPER, RAC, OIG, CERT and other rules-based models to establish a billing and coding risk assessment.
- An EHR uses rule-based algorithms to **manage and streamline clinical workflows**, such as patient admissions, discharges, and transfers

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## Generative AI

- › Generative AI allows machine learning algorithms to **translate simple descriptions into text, images and other output**.
- › These models are normally trained on large and varied data sets
- › On the downside, it is often seen as a “black box” with less transparency in decision-making processes

Examples:

- **Automates the creation of clinical notes and reports**
- Offers **evidence-based recommendations** based on vast medical literature
- Provides virtual assistance and answers patient questions

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## Computer Vision

- › Computer vision applications enhance diagnostics, treatment, and operational efficiency, leading to improved patient care and streamlined workflows

Examples:

- AI algorithms **analyze medical images** such as X-rays, CT scans, and MRIs to detect abnormalities
- Computer vision models **analyze pathology slides** to identify cancerous cells and other abnormalities
- **Monitors patients** in hospital rooms, detecting movements and potential falls
- **Analyze images of skin lesions and moles**, assessing the risk of skin cancer

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## 2. Business Implications

### AI Promises Everything From Mundane Efficiencies to Phenomenal Achievements



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# AI Business Opportunities Healthcare



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## Benefits of AI for Healthcare Leaders



**Enhanced Decision-Making:**

AI provides data-driven insights including predictive analytics that improve the quality and speed of decision-making.



**Realize Operational Improvements:**

AI can automate routine tasks, reduce errors, and increase efficiency in workflows and resource allocation.



**Improve Patient Outcomes:**

AI applications can lead to better patient outcomes through predicting complications, providing fast access to accurate diagnostics and offering personalized treatments.



**Competitive Advantage:**

Early adoption of AI can position healthcare organizations at the forefront of innovation, providing a competitive edge.

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## Tactical Execution with AI

### Can be used in daily operations

- > Enhance clinical workflows
- > Optimize scheduling and resource management
- > Limit billing and coding risk
- > Improve supply chain efficiency

### Can be used for longer term planning

- > Budget estimation
- > Predicting break-even point for new physicians
- > Identify employees most likely to quit in the next six months

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## Challenges in Implementing AI



### Ethical considerations / Data Validity:

Bias in AI can exacerbate health disparities and lead to legal and reputational issues



### Scalability and Maintenance:

Scalability issues can limit AI benefits, and inadequate maintenance can lead to performance degradation



### Financial and resource constraints:

Limited resources can delay AI implementation and limit its scope



### Regulatory and compliance issues:

Non-compliance can lead to legal penalties and hinder AI deployment

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## Challenges in Implementing AI (continued)



### **Data Privacy and Security**

Data breaches can lead to loss of patient trust, legal penalties, and financial losses



### **Trustworthiness:**

Inaccurate or incomplete data can lead to unreliable AI predictions and decisions



### **Integration with existing systems:**

Poor integration can lead to workflow disruptions, data inconsistencies, and reduced efficiency



### **Change management:**

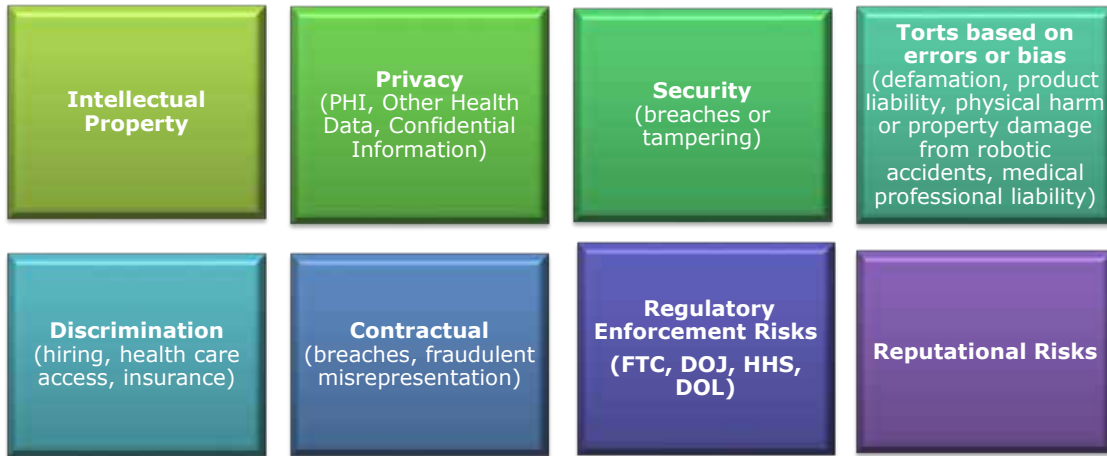
Resistance and lack of training can hinder AI adoption and limit its effectiveness

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## 3. Spotting Key Risks

## Selected AI Risks of Harm



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## How AI Creates or Exacerbates Privacy and Security Risks

- Need large databases for training
- Potential for data leakage and misuse
- Integrated into IT systems
- Third Party applications may not be secure
- Combining data sets allows for faster identification and profiling
- Scale, scope and speed of AI processing, development and innovation



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## Selected Thorny AI Privacy or Security Legal Issues

- Use of Health Data as Training Data (PHI and/or consumer health data)
- De-Identification or Anonymization
- Data access, deletion or accounting of disclosures
- Amending privacy policies and obtaining required consents or authorizations
- Discovery of personal device data in litigation
- Website tracking technologies; ad serving

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## Managing the Risks of AI

### Piecemeal Approach Does Not Work Well

- Breadth and depth of legal and technical issues
- Need for consistency in analysis and trade-offs
- Need for organizational support at board level
- Requires multi-disciplinary and cross-functional teams
- Potential need for outside advice and counsel



### Most Effective Approach Enterprise-Wide AI Governance Program

- Is and will be required by law
- Is a defense for litigation and enforcement
- Will be expected by customers and investors
- Enables competitive advantage
- Maximizes opportunities

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## Why Human Validation is Crucial

**01.**

### **Mitigating Bias and Errors**

AI/ML algorithms can inherit biases from training data, leading to inaccurate or unfair outcomes.

**02.**

### **Enhancing Interpretability**

Human experts help interpret AI/ML outputs, ensuring they align with real-world contexts and understanding.

**03.**

### **Ensuring Ethical Compliance**

Human oversight is essential for maintaining ethical standards and preventing unintended consequences.

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## Strategies for Effective Human Validation

**01.**

### **Cross-Disciplinary Review**

Engage experts from diverse fields to review AI/ML outputs and provide feedback.

**02.**

### **Continuous Monitoring**

Implement ongoing validation processes to regularly check the accuracy and relevance of AI/ML algorithms.

**03.**

### **Feedback Loops**

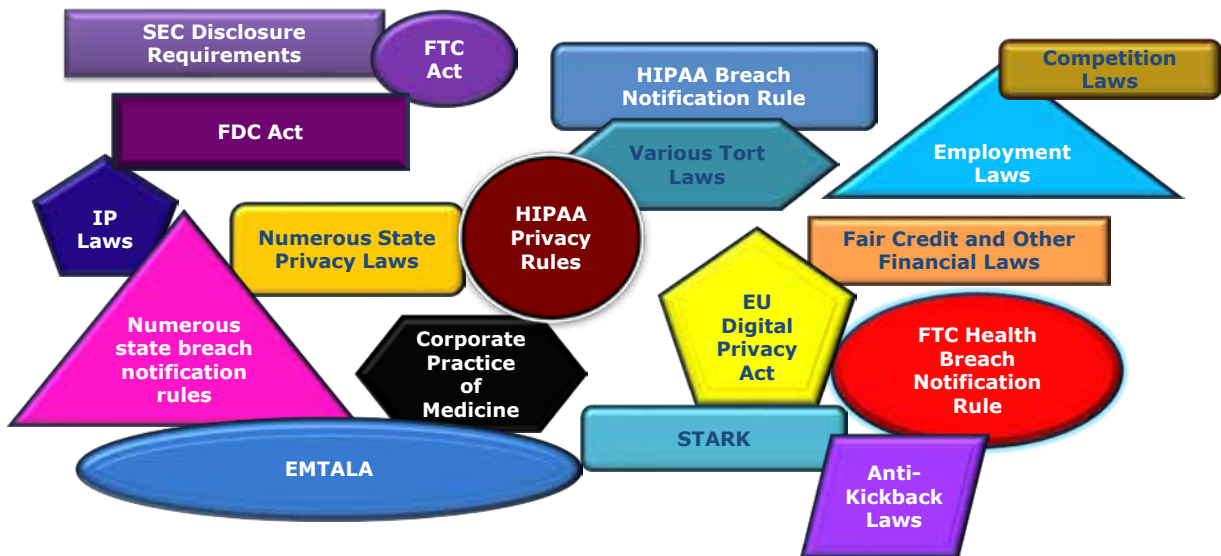
Create systems where human feedback is continuously integrated into the AI/ML models for improvement.

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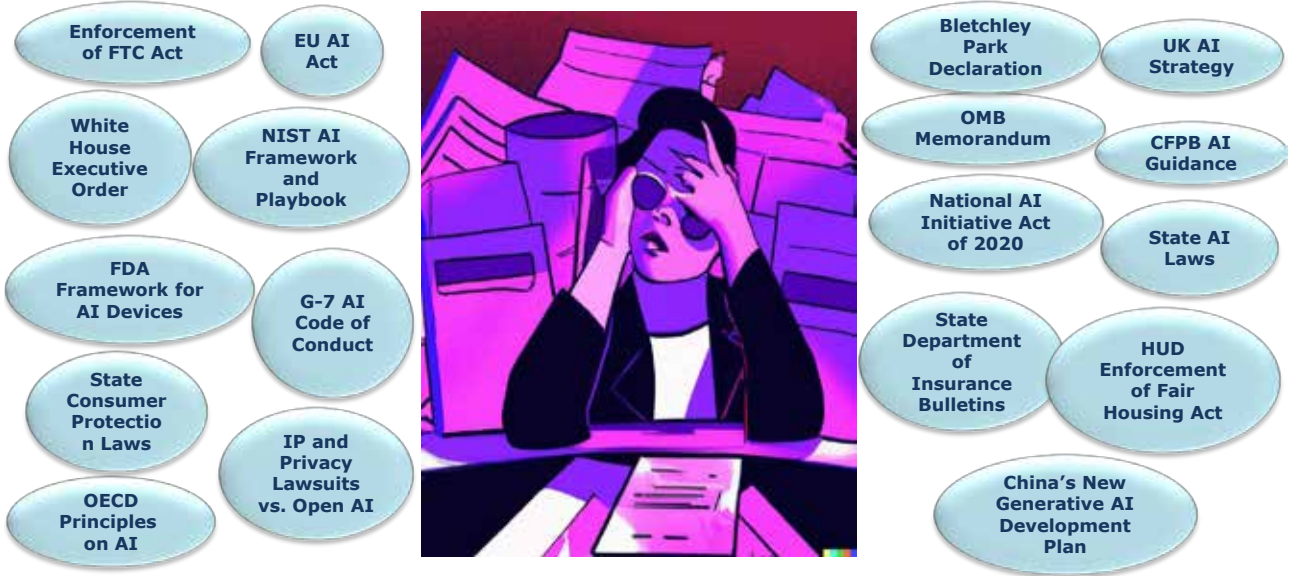
## 4. Legal Considerations

Existing laws already apply to AI.



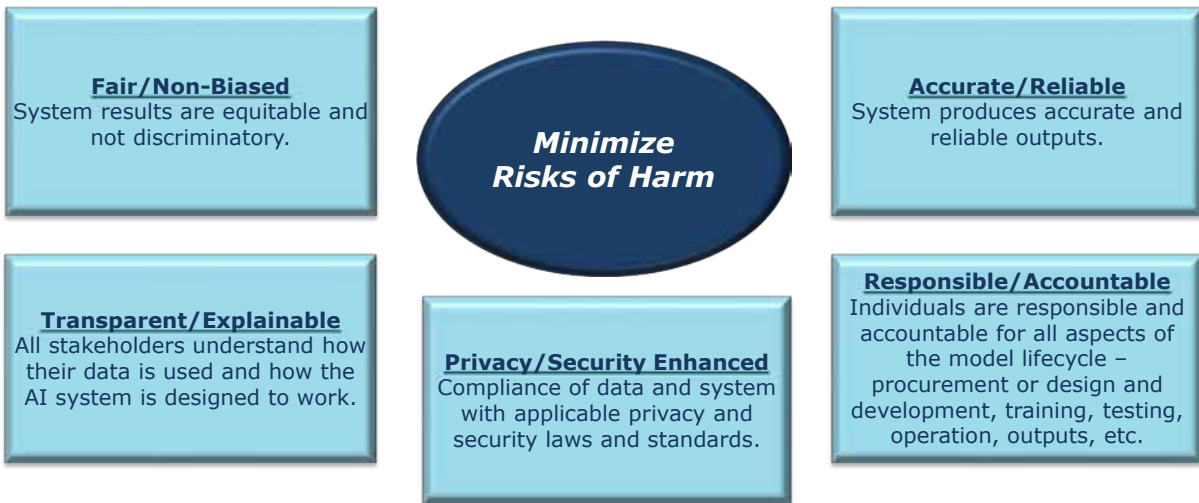
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Global proliferation of thousands of pages of complex, often technical, new and proposed AI laws, Executive Orders, frameworks, enforcement actions, lawsuits, pacts, and guidance



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New laws coalesce around the legal requirements designed to minimize risk of harm



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## Spotlight on Selected Developments

- Change Healthcare cyberattack; CrowdStrike crash
- DOJ has warned about use of AI recommender systems in health care
- FTC enforcement actions: Everalbum, WeightWatchers, Rite-Aid
- Use of tracking technologies—HHS vs. AHA
- CO AI Act – first “comprehensive” AI law in U.S.
- ONC Final Rule—HT1 and algorithmic transparency
- Kentucky Department of Insurance Bulletin 2024-02
- Kentucky Consumer Data Protection Act

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## 5. Building Effective Governance

## AI Governance Components

1. Establish governance framework and empower business
2. Map AI technology – identify, classify, describe.
3. Identify and quantify the risks of each AI system (i.e., IP, data privacy or security, bias or discrimination, contractual, regulatory, product liability or other tort, etc.)
4. Determine how to minimize or manage each risk (Policies and procedures, disclosures or notices, insurance, commitments from vendors, training, data minimization, documentation, filters at the front and back ends, synthetic data, testing and monitoring, new technologies for risk detection, assessment and management, etc.)
5. Ongoing review and revision
6. Integrate with Data Governance, Privacy, Security and ESG Program



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## AI Governance Takeaways

- It will be a dynamic work in progress.
- Flexibility and compromise required.
- Plan but expect surprises.
- Rely on others – the process requires the participation of and input from all stakeholders.
- New tools and processes are being developed to make it more efficient and easier.



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Thank you!



DISCUSSION DRAFT

*ABI Healthcare and Emerging Technology Committees  
Winter Leadership Conference*

[Title: Transforming Healthcare: The Business Impact of AI](#)

December 13, 2024 (11:00am MST)

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Synopsis:

Get ready to dive into the future of healthcare as we uncover the revolutionary impact of AI! Following a dynamic overview of the current AI landscape and its rapid advancements, we'll discuss groundbreaking AI applications and the subsectors and players set to thrive—or falter—as AI reshapes healthcare.

Our panel of experts will share investment trends and speak to the enthusiasm of providers, private equity and lenders for AI innovations. Risks will be considered, including workforce impacts, cost, regulation and potential hurdles that come with AI. We'll cover critical legal issues, including intellectual property and data privacy in the bankruptcy context.

Looking ahead, our experts will offer predictions for the next 5-10 years, including how AI will impact restructuring professionals and what clients may expect of us. Join this session to be part of the conversation shaping the future of healthcare!

Learning Objectives:

Attendees will:

1. Be able to define key AI concepts (i.e., Artificial Intelligence, Machine Learning, Generative AI) and their applications in healthcare.
2. Explore AI's impact on healthcare delivery while recognizing its limitations and barriers.
3. Analyze financial opportunities and challenges of AI adoption and understand how different subsectors might benefit or face hurdles.
4. Consider the appetite to invest in AI, including healthcare providers, private equity, and lenders.

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### DISCUSSION DRAFT

5. Be informed of legal, ethical, and operational risks of AI, such as data privacy, employment law,
6. Examine AI's future trajectory in healthcare, and the impact AI is expected to have on restructuring professionals.

### Panelists: (3 speakers + Moderator)

Role	Name
<ul style="list-style-type: none"><li>• Lawyers with relevant expertise (healthcare, technology, IP/privacy, bankruptcy).</li></ul>	<b>Barbara Bennett</b> (Frost Brown Todd) <a href="#">see bio summary below</a>
<ul style="list-style-type: none"><li>• Technology experts, analysts or investors – either consultants or firms that are bringing the technology to the healthcare market.</li></ul>	<b>Otis Hendershott</b> (Chief Data and Technology Officer, VMG Health) <a href="#">see bio summary below</a>
<ul style="list-style-type: none"><li>• Healthcare provider organizations – how they are using AI and the benefits they expect to see.</li></ul>	<b>Patrick Darby</b> at <b>Encompass Health</b> (inpatient rehab hospitals) and former bankruptcy lawyer <a href="#">see bio summary below</a>
<ul style="list-style-type: none"><li>• Moderator role</li></ul>	<b>Clare Moylan</b> (Gibbins Advisors) <a href="#">see bio summary below</a>

DISCUSSION DRAFT

Panelist Bios:

**Barbara Bennett** (Frost Brown Todd) <https://frostbrowntodd.com/people/barbara-bennett/>

Barbara is a nationally recognized health care, data privacy and AI governance attorney who has been involved since the beginning at the intersection of Internet technology and the law. She holds the AI Governance Professional (AIGP) certification from the International Association of Privacy Professionals. Noted for her M&A, data privacy and governance, and strategic business advice, Barbara has led transactions and provided counsel for sophisticated and complex health care and other businesses that have included numerous multinational Fortune 50 companies. A sought-after critical thinker and trusted strategic legal advisor, Barbara has counseled clients that include health plans, hospital systems, behavioral health businesses, labs, pharmaceutical and device manufacturers, and companies providing IT, revenue cycle, turn-key management and data analytics services. She has been a successful senior partner in a top-ten global law firm, as well as having more than a decade of in-house legal and business experience, including as General Counsel.

**Patrick Darby (Encompass Health)**

Patrick Darby is Executive Vice President, General Counsel, and Corporate Secretary of Encompass Health Corporation (NYSE: EHC), which owns and operates 166 inpatient rehabilitation hospitals in 38 states and Puerto Rico. Formerly with Bradley Arant Boult Cummings in Birmingham, Alabama, he is a Fellow in the American College of Bankruptcy.

**Otis Hendershott (Chief Data and Technology Officer):** <https://vmghealth.com/otis-hendershott/>

Otis Hendershott serves as Chief Data and Technology Officer for VMG Health and is accountable for overall technology/data strategy and execution for the enterprise. This role encompasses InfoSec, enterprise/data architecture, digital properties, vendor and partner management, tech product, I&O and technology support functions.

Otis came to VMG Health from United Health Group's Optum Technology division. His expertise encompasses a wide spectrum of healthcare domains, including payor services, care delivery, pharmacy benefit management, complex conditions management, value-based care, electronic medical record implementations, and utilization management. During his tenure at Optum, Otis played pivotal roles in shaping the organization's technological landscape. Notably, he led the establishment of a global software engineering organization, instrumental in developing an industry-leading clinical support tool tailored for oncologists. Additionally, Otis provided strategic direction and oversaw technology execution for OptumCare's Northeast/Midwest Region, contributing significantly to the company's operational excellence and market positioning.

**Clare Moylan, Gibbins Advisors** (Education Director, ABI Healthcare Committee, and Principal of Gibbins Advisors) <https://gibbinsadvisors.com/our-team/clare-moylan/>

Clare Moylan is a co-founder and Principal of Gibbins Advisors, a consulting and restructuring advisory firm that specializes in the middle market healthcare sector. Clare brings ~20 years of experience in healthcare spanning turnaround and restructuring, operations management, strategic planning, business analysis and performance improvement consulting. She is highly skilled at taking complex problems, bringing clarity to the key issues, and supporting multiple layers of stakeholders to work toward an agreed solution.

Clare's experience covers the public, private, and not-for-profit sectors across the healthcare continuum: hospitals, primary care, nursing homes, hospice, specialty practice clinics, senior living and home health care.

Clare is a CFA Charterholder and Certified Insolvency and Restructuring Advisor. She has a Bachelor of Business Administration/ Bachelor of Laws (First Class Honors) from Macquarie University and a Master Certificate in Healthcare Leadership from Cornell University.

Clare serves as a Non-Executive Director for The Skin Hospital, a non-profit dermatology services provider with research and specialist training programs.

# DISCUSSION DRAFT

DISCUSSION DRAFT

Detailed Outline:

**Part 1: Understanding AI in Healthcare (15 mins)**

**Define AI and terminology:** Artificial Intelligence, Machine Learning, Large Language Models, Generative AI, etc.

**Introduction:** Set the stage for AI's role in healthcare, explaining its technology and industry maturity. Discuss the rapid evolution of AI technology and its implications for healthcare.

**Use Cases & Limitations:**

- Present various applications of AI in healthcare. Discuss how AI could reshape the delivery of healthcare services and care quality.
- Also, discuss situations where its use may be intentionally limited.
- Practical Barriers: Including access to enough data to train the AI models

**Part 2: Business Implications (15 mins)**

**Market Impact:** Discuss which subsectors of healthcare might be most affected by AI and its implications for efficiency and cost.

**Financial Opportunities:** Explore the financial incentives and opportunities associated with AI in healthcare. Can it help financially challenged organizations? Is it a short term or long term payoff (or both)?

**Funding and Reimbursement:** Explore the implications of AI adoption on reimbursement rates and potential government support.

**Winners & Losers:** Who gains from AI innovations and who loses or falls behind if they don't adopt the technology?

**Part 3: Capital, Risks, and Legal Considerations (10 mins)**

**Capital Sources' Response:** Cover the attitudes of private equity, private credit, and lenders toward AI in healthcare as well as enforcement authorities concerning AI investment.

**Risk Assessment:** Identify potential legal and operational risks and impacts of AI technology, including labor displacement, cost implications and legal liability risks.

**Legal and Ethical Issues:** Delve into intellectual property, data privacy, security, employment law, contractual considerations and emerging laws surrounding AI in healthcare. Address the path toward maximizing success and minimizing loss with a robust AI governance program.

**Part 4: Future Direction for AI in Healthcare (10 mins)**

**Outlook:** Explore the trajectory of AI in healthcare and potential advancements and limitations. Where is it heading? What can we expect to see in 5-10 years? How do we ensure the impact is good rather than bad?

**Part 5: Impact of AI on professionals (10 mins) – How are we affected day-to-day?**

AI's impact on restructuring professionals – where is it now and where is it heading, including legal and ethical considerations. Who are the different stakeholders to consider (clients, judges, different jurisdictions, employees, etc.).



## DISCUSSION DRAFT

### Appendix Notes

#### [#1 ChatGPT prompt: what are the different types of AI?](#)

##### **ChatGPT response:**

There are several types of artificial intelligence (AI), categorized based on their capabilities, development approach, and application. Here are the primary types:

##### **1. Based on Capability:**

###### **Narrow AI (Weak AI):**

This is AI specialized in performing a specific task or a narrow range of tasks. It is the most common form of AI in use today.

Example: Virtual assistants like Siri, recommendation algorithms, facial recognition.

###### **General AI (Strong AI):**

AI with the capability to understand, learn, and apply intelligence across a broad range of tasks, much like a human. It can perform any intellectual task that a human being can.

General AI is still theoretical and does not exist yet.

###### **Superintelligent AI:**

A hypothetical AI that surpasses human intelligence in all aspects, including creativity, problem-solving, and decision-making. This concept is associated with futuristic and speculative discussions.

It remains theoretical at this stage.

##### **2. Based on Functionality:**

###### **Reactive Machines:**

These are the simplest forms of AI. They can react to specific inputs but cannot store memories or use past experiences to inform future actions.

Example: IBM's Deep Blue, a chess-playing computer.

###### **Limited Memory:**

This type of AI can store and use past experiences to make better decisions, but its memory is not long-term or complex.

Example: Self-driving cars, which use data from the past to improve navigation.

###### **Theory of Mind:**

This type of AI, still theoretical, would understand emotions, beliefs, and intentions, allowing it to interact socially with humans in a meaningful way.

###### **Self-aware AI:**

The most advanced form of AI, it would have its own consciousness, self-awareness, and understanding of its existence. This type does not yet exist and remains speculative.

##### **3. Based on Technology & Learning Approach:**

###### **Machine Learning (ML):**

A subset of AI where machines learn from data without being explicitly programmed. They use algorithms to find patterns and make decisions.

Example: Predictive analytics, recommendation systems.

DISCUSSION DRAFT

**Deep Learning (DL):**

A more advanced subset of machine learning based on artificial neural networks. It is used for tasks that involve vast amounts of data and complex patterns.

Example: Image recognition, natural language processing.

**Natural Language Processing (NLP):**

A field of AI that focuses on the interaction between computers and human languages. It allows AI to understand, interpret, and respond to human language.

Example: Chatbots, language translation services.

**Computer Vision:**

This involves teaching machines to interpret and make decisions based on visual data (images or videos).

Example: Facial recognition, autonomous vehicles.

**Reinforcement Learning:**

An area of ML where an AI agent learns by interacting with its environment and receives feedback in the form of rewards or penalties.

Example: Robotics, game-playing AIs.

**4. Emerging & Specialized Types:**

**Generative AI:**

This AI generates new data similar to the data it was trained on. It can create images, music, text, and other forms of media.

Example: ChatGPT (used for text generation), DALL-E (used for image generation).

**Explainable AI (XAI):**

AI systems designed to be transparent in their decision-making process, providing explanations for their outcomes.

This is crucial for sectors where trust and accountability are important, like healthcare and finance.

**Autonomous AI:**

AI systems capable of operating independently in complex environments without human intervention.

Example: Drones, autonomous vehicles.

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## DISCUSSION DRAFT

#2 ChatGPT prompt: [I inserted panel outline]

### ChatGPT response:

#### Part 1: Understanding AI in Healthcare (15 mins)

##### Define AI and Key Terminology

- **Artificial Intelligence (AI):** The ability of machines to perform tasks that typically require human intelligence, such as problem-solving, decision-making, and language understanding.
- **Machine Learning (ML):** A subset of AI where machines improve their performance over time without explicit programming, using data to 'learn' and make predictions.
- **Large Language Models (LLMs):** These are advanced ML models trained on vast datasets of text (like GPT-4), capable of generating, understanding, and summarizing human language.
- **Generative AI:** A branch of AI focused on creating new content, such as images, text, or even medical diagnostics, from existing data.

##### Introduction

- AI's role in healthcare is rapidly expanding, driven by advancements in data science and computing power.
- The industry is transitioning from early exploration to more practical, real-world applications, especially in diagnostics, personalized medicine, and operational efficiency.
- AI technology's maturity in healthcare is still developing, with significant potential for growth, though regulatory and ethical frameworks are still catching up.

##### Use Cases & Limitations

- **AI Applications in Healthcare:**
  - **Diagnostics:** AI algorithms that read imaging data for diseases like cancer and detect patterns often missed by humans.
  - **Personalized Medicine:** AI can analyze a patient's genetic data to recommend tailored treatments.
  - **Operational Efficiency:** Streamlining hospital management, optimizing supply chains, reducing patient wait times.
- **Limitations:**
  - **Intended Limitations:** Human oversight may still be necessary for ethical and safety reasons, particularly in life-or-death situations.
  - **Practical Barriers:** AI models require large, high-quality datasets for training, which many healthcare providers do not have access to. Data privacy and security issues also impose limits on widespread adoption.

#### Part 2: Business Implications (15 mins)

##### Market Impact

- Sub-sectors likely to see the most disruption include radiology, pathology, drug discovery, and administrative tasks like billing and scheduling.
- AI could lead to greater efficiency, lowering costs and improving patient outcomes, but not all organizations will adapt at the same pace.

##### Financial Opportunities

- For financially distressed healthcare providers, AI could present both short-term and long-term benefits.
  - **Short-Term Gains:** Immediate cost reductions in administrative processes, diagnostics, and operational workflows.
  - **Long-Term Gains:** AI has the potential to significantly reduce medical errors, improve patient outcomes, and streamline care.
- AI offers an opportunity for distressed organizations to optimize resources, but initial investment in technology and training could be a barrier.

##### Funding and Reimbursement

- AI may influence future healthcare reimbursement models, particularly as value-based care becomes more prominent.
- Governments and private insurers may offer incentives to adopt AI tools that lower healthcare costs and improve patient outcomes.

##### Winners & Losers

- **Winners:** Organizations that embrace AI early may gain a competitive edge, improving patient care and cutting costs.

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- **Losers:** Hospitals and care providers that don't invest in AI risk falling behind, particularly in a sector where efficiency and precision are becoming critical.

**Part 3: Capital, Risks, and Legal Considerations (10 mins)**

**Capital Sources' Response**

- **Private Equity and Lenders:** Generally optimistic about AI's potential to enhance efficiencies and profitability, but cautious of upfront costs and regulatory uncertainties.
- **Private Credit:** Likely to be more conservative, evaluating long-term viability and risk of returns.
- **Enforcement Authorities:** Scrutiny is growing around how healthcare providers integrate AI, particularly in terms of patient privacy and outcomes.

**Risk Assessment**

- **Legal Risks:** Potential liability for errors or biased decisions made by AI models. In some cases, AI could increase malpractice claims if its use isn't clearly understood or trusted.
- **Operational Risks:** Costs of implementation, potential disruption to existing workflows, and the risk of displacing staff.

**Legal and Ethical Issues**

- **Data Privacy & Security:** Healthcare data is highly sensitive, and AI's reliance on data introduces privacy concerns.
- **Employment Law:** AI may reduce the need for certain job roles, especially in administrative or diagnostic positions.
- **Intellectual Property:** AI models require complex contracts regarding ownership of innovations.
- **AI Governance:** Implementing strong AI governance frameworks can minimize these risks and ensure compliance with emerging laws.

**Part 4: Future Direction for AI in Healthcare (10 mins)**

**Outlook**

- AI will likely continue to evolve, with more robust applications in drug development, remote care, and predictive analytics. However, technology will need to align with ethical, legal, and practical healthcare needs.
- **5-10 Years Ahead:**
  - AI in surgery and robotics could become mainstream.
  - Deep learning algorithms will drive breakthroughs in disease prediction.
  - Continuous data monitoring (via wearables) will make preventive care more personalized.
- **Ensuring Positive Impact:** Collaboration between AI developers, healthcare providers, and regulators will be essential to create frameworks that prioritize patient well-being and safety.

**Part 5: Impact of AI on Healthcare Professionals (10 mins)**

**Impact on Restructuring Professionals**

- **Current Impact:** AI is already influencing areas like financial modeling and scenario planning for restructuring efforts. Automated data analysis could speed up turnaround times for distressed organizations.
- **Future Impact:** In the near future, AI will be integrated into more legal processes, requiring professionals to be familiar with both the technology and its implications on client outcomes, financial health, and legal frameworks.

**Stakeholders**

- **Clients and Judges:** Expect AI-driven insights to become common in litigation, financial restructuring cases, and contract disputes.
- **Jurisdictions and Employees:** Regulations will vary widely across regions, and professionals will need to adapt their AI strategies based on local laws and workforce impacts.

## DISCUSSION DRAFT

### Panel Moderator prompting questions:

#### 1. AI in Healthcare Applications

- “What is AI? What are the types of AI available now, and what is still under development?” [OH]
- “Which AI applications in healthcare do you think will have the most immediate and transformative impact on healthcare organizations?” [OH & PD & BB]
  - PD: Predicting risks + outcomes. E.g. heart disease, fall risk. Different to detect fraud – not PREDICT fraud. DOJ tries to treat algorithm result as fact)
  - BB: Algorithms have problems. They had labelled data in a way that predicted the outcome. It was a false application. They had things that indicate sepsis which skewed the prediction. Data not necessarily clean + perfectly organized.
- “What are the most promising examples you’ve seen of AI reducing operational inefficiencies in healthcare settings?”
  - OH: Limited levers to improve profitability in h/c. Refer slide 12 of VMG materials. Process huge amounts of data. Mass General using it for efficiency in processes in ER. Operating room efficiency (emergency and planned). Workflows.
  - OH: Emerging tech has followed a maturity path over time and AI is no different.
  - PD: Don’t ignore it, but be critical of it, you need to make it a good thing. You have to be careful, efficiency shouldn’t be an end in itself. Efficiency can be contrary to good patient care. It has to get people better and get them out of the system. Biases can be baked into the algorithm. E.g. the fraud algorithm assumes a certain amount of fraud. I see a similar assumption about efficiency. There has to be a perception outside of the algorithm: are we really making positive ground? Are patients getting better? Apply REAL intelligence to what the AI is telling you.
  - BB: Another consideration is that we have the fraud detection algorithm and the providers have the claim algorithm to fit the fraud algorithm to avoid being triggered. Same with security. One algorithm against another one.
    - PD: These algorithms are not providing an answer – they are providing a prediction based on probability. They are saying something that might be true, not necessarily a fact. The **perception** is that AI is better.
    - OH: One could argue that doctors are doing the same thing – trying to predict based on their experiences and knowledge. Sometimes the algorithm and doctors are very close – e.g. radiology.
    - BB: Agreed for imaging. Not the same for all specialties.
- “What will AI **not** impact in healthcare? What can we expect to stay the same?”
  - OH: Clinical decision **support** – not clinical decision making. You need a human to make the decision. You never want AI making ethical decisions.
  - BB: I don’t think it will lower the **inequities** in healthcare. It could make them worse. On rural – they have tried to use telehealth and ways to improve access for decades but I don’t see the investment in that area.
  - OH: telehealth has taken a beating since COVID. Connectivity is an issue in rural. We are reaching the limits of telehealth. ER diversion – no-one has been able to do it at scale.
  - PD: technology cannot replace hands on bodies. Not for complex.

#### 2. Financial and Market Impact

- “How do you think AI will reshape the business aspects of healthcare? Will it be a long-term payoff, or are there short-term gains organizations should expect?”
  - OH: My sense is there will be long term gains but in the short term it will focus on operating efficiency. You may get spikes of productivity and efficiency. You might see really good uses for subsets of the population – depends on data input and where it can be effectively used.
  - OH: It may be interesting to see how it impacts benefit design. Returns on “wellness programs” are abysmal. Better align care + services with things that benefit.
  - BB: If we shift from providers – you’ll see a lot in pharma, personalized immunotherapy, managed care. May be more outside the provider space at first.
  - PD: Problem with wellness programs is that people don’t eat right and exercise.
- “Can AI help financially distressed hospitals or healthcare organizations to turn things around?”
  - BB: Once you’re financially distressed I don’t think AI will save you.
  - PD: Not help fast enough. It requires capital. Doctors still have fax machines because they don’t have money and time to upgrade.

DISCUSSION DRAFT

**3. Barriers and Challenges to Implementation**

- “Focusing on the positive aspects of AI adoption, when we want people do use AI, what do you see as the biggest barriers to AI implementation in healthcare?”
  - OH: Access to enough data to get helpful predictions. Data is not normalized, available across the risk pools you want to evaluate.
  - PD: It’s a problem and there’s no solution. Our AI works because it’s narrow and limited. We’ve had EMR for 15 years. We have reliable, good quality data and we are not giving it away. My tool helps me – and no-one else.
  - BB: All the data we have is full of AI-generated data and biases...maybe the smaller databases that are clean and constantly refreshed.
  - PD: Risk of “model collapse” where you have AI using data that is AI-generated.
- Issue of bias:
  - OH: Also bias in the models – you may find it too late. Tricky to find.
  - PD: Everything contains bias.
  - BB: Need to consider is it unfair or discriminatory.
- “How can the industry overcome these obstacles?”
  - PD: Clear-sighted thinking, honesty about the problems, take it slow. There will never be a perfect solution. Identify problems and minimize. If true to 99% probability – don’t lose sight of that.

**4. Risk, Legal and Governance Considerations**

- “What are the top 3 key business and legal risks that come to mind with AI in healthcare?”
  - BB: Privacy, security, accuracy (inputs/outputs), integration into workflow.
  - PD: Protect your data. Don’t let the ppl who are trying to make \$ do it with your data. Risk of being sued for relying on AI – but soon you’ll be sued for not using it. Risk: don’t let your employees stop thinking. Blind reliance on computers. They will lose the capacity to question the algorithm. (example of the form summary – if you don’t know how to write it, you don’t have the capacity to edit it).
  - OH: Orgs need to be careful about using AI. Where does it really add value. Keep pumping resources into it or pull the plug? Right AI tool for the right job. (example of AI chatbots for ER diversion. Optum venture)
- “What is the current role of **regulators** in mitigating risks? What protections are they putting in place? What legal or regulatory challenges do you foresee as AI becomes more integrated into healthcare? Are current frameworks adequate, or do they need to evolve?”
  - BB: All the regulatory agencies are all over AI. Give examples.
- “What are **organizations** doing to protect against the risks of AI?”
  - OH: Larger ones have governing bodies.
  - PD: Fighting the tide, something pops up every month. AI meeting notes. New communication channels. They don’t think they are putting it in writing and sooner or later we are going to get hammered. Capital outlay of AI controls many aspects. Most boards of directors are not wholly familiar with this stuff.
  - BB: Train your people how to speak in the meetings (Teams).
  - OH: The clinical notes are much better at picking up the nuances. Better than CoPilot. They have 30 years of healthcare transcription.
- “What role do you see for AI governance in healthcare organizations? How should leaders approach developing a responsible AI strategy?”

**5. Impact on Workforce**

- “How do you think the roles of **healthcare workers** will change as AI becomes more integrated into daily operations?”
- “What about for **restructuring professionals**? What should we expect, and are we ready for it?”

**6. Ethical and Social Considerations**

- “What are the societal implications of AI in healthcare, particularly in terms of access to care? Could AI exacerbate or help bridge the healthcare divide?”

**7. Future of AI and Innovation**

- “In the next 5-10 years, where do you see the most exciting advancements in AI for healthcare?”

DISCUSSION DRAFT

- “What do you think the healthcare industry needs to do now to ensure that AI delivers positive outcomes in the future, both for providers and patients?”

# Faculty

**Barbara Bennett** is a partner in the Nashville, Tenn., office of Frost Brown Todd LLP and is vice chair of the firm's Committee on Artificial Intelligence. She is a nationally recognized health care, data privacy and AI governance attorney who has been involved since the beginning at the intersection of internet technology and the law. Ms. Bennett holds an AI Governance Professional (AIGP) certification from the International Association of Privacy Professionals. Noted for her M&A, data privacy and governance, and strategic business advice, she has led transactions and provided counsel for sophisticated and complex health care and other businesses that have included numerous multi-national Fortune 50 companies. Ms. Bennett has counseled clients that include health plans, hospital systems, behavioral health businesses, labs, pharmaceutical and device manufacturers, and companies providing IT, revenue-cycle, turnkey management and data-analytics services. She has been a successful senior partner in a top-10 global law firm, and she has more than a decade of in-house legal and business experience, including as general counsel. Ms. Bennett is a member of the Tennessee Bar Association's AI Task Force, the International Women's Forum, and the Tennessee Bar Commission on the Status of Women and Minorities. She received her B.S. *magna cum laude* in mathematics from Vanderbilt University and her J.D. from Vanderbilt University Law School, where she was admitted to the Order of the Coif and served as articles editor of the *Vanderbilt Law Review*.

**J. Patrick Darby** is executive vice president, general counsel and corporate secretary of Encompass Health in Birmingham, Ala. Before joining Encompass Health in 2016, he was a bankruptcy lawyer at Bradley Arant Boult Cummings and an adjunct professor at the Cumberland School of Law. He has represented debtors in chapters 11 and 9 and out-of-court restructurings, and secured lenders, bondholders, construction companies, buyers of distressed assets, trade vendors and preference/fraudulent-transfer defendants. Mr. Darby's significant health care cases include filing two chapter 11s for Carraway Methodist Hospital, restructuring Cooper Green Mercy Hospital in the Jefferson County chapter 9 case, representing the buyers of hospitals and other health care properties in several chapter 11 and chapter 9 cases, and representing debtors and lenders in various assisted living, skilled nursing facility and other health care cases. He also was part of the defense team in the AseraCare False Claims Act case. Mr. Darby is a Fellow in the American College of Bankruptcy. While in practice, he was listed in *Chambers USA*, *The Best Lawyers in America* and *Alabama Super Lawyers*. Mr. Darby received his undergraduate degree from Dartmouth College and his J.D. *magna cum laude* from Washington & Lee School of Law, where he was editor in chief of its law review. He subsequently clerked on the U.S. Court of Appeals for the Second Circuit.

**Otis Hendershott** is Chief Technology and Data Officer with VMG Health in Manchester, N.H., and is accountable for overall technology/data strategy and execution for the enterprise. This role encompasses InfoSec, enterprise/data architecture, digital properties, vendor and partner management, tech product, I&O and technology support functions. Mr. Hendershott previously was with United Health Group's Optum Technology division. His expertise encompasses a wide spectrum of health care domains, including payor services, care delivery, pharmacy benefit management, complex conditions management, value-based care, electronic medical record implementations and utilization management. During his tenure at Optum, Mr. Hendershott played pivotal roles in shaping the organization's technological landscape. Notably, he led the establishment of a global software engineering organiza-



tion and was instrumental in developing an industry-leading clinical support tool tailored for oncologists. Additionally, he provided strategic direction and oversaw technology execution for Optum-Care's Northeast/Midwest Region, contributing significantly to the company's operational excellence and market positioning. He received a B.A. in 1997 in English language and literature/letters from State University of New York (SUNY) College at Potsdam, a B.A. in English from SUNY Geneseo in 2000, and his M.S. in health systems administration from the Rochester Institute of Technology.

**Clare Moylan, CFA, CIRA** is a co-founder and principal of Gibbins Advisors, LLC in Nashville, Tenn., a consulting and restructuring advisory firm that specializes in the health care sector. She has nearly 20 years of experience in health care spanning turnaround and restructuring, operations management, strategic planning, business analysis and performance-improvement consulting. Ms. Moylan's experience covers the public, private and nonprofit sectors across the health care continuum, including hospitals, primary care, nursing homes, hospice, specialty practice clinics, senior living and home health care. Ms. Moylan serves as a volunteer non-executive director for The Skin Hospital, a nonprofit dermatology services provider with research and specialist training programs. She received her B.B.A./Bachelor of Laws with first-class honors from Macquarie University, and she holds a Master Certificate in Healthcare Leadership from Cornell University.