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Health Systems Initiative

HSI Newsletter: December 2025

In this issue, we share highlights from our 2025 conference on Employee Population Health and summaries of two lunchtime seminars.

On October 23rd, we held our fourth meeting for the [HSI Lab on Employee Population Health](#). We've included highlights from that conference in an article below.

On November 12th, Sloan MBA alums [Harison Hong, MD](#), and [Tim Sun](#) presented [AI Agents: Accelerants for Drug Discovery and Commercialization](#). On December 3rd, [Alain Eudarc](#), Sloan MBA, President of [Idea Pathways](#) and co-author of [The Thriving Biopharma Business](#), presented [Thriving through Strategic Inflection Points in Biopharma](#).

Under [Events](#), we are pleased to announce the upcoming [Sloan Healthcare and Bioinnovations Conference](#), scheduled for February 27th, 2026. Once again, we are cosponsoring this event.

As always, if you have any questions or suggestions, please contact us at healthsystems@mit.edu.

NEWS

Sloan Alum and BioPharma Expert Talks Strategic Inflection Points, Strategy and Messaging



gained over 30 years in the industry. Biopharma is a capital-intensive, high-risk environment where success is rare, but it can be transformative for companies, investors, and patients. Bringing a single new drug to market is a complex and extraordinarily expensive journey, during which the vast majority of promising projects fail. In his overview, Eudarcic focused on three areas: inflection points, understanding the market landscape, and crafting the message.

Inflection Points

A biopharma company’s success hinges on its ability to manage a series of critical moments called strategic inflection points. In this case, a strategic inflection point is a moment where new information fundamentally changes a program’s outlook and perceived value. It is a data-driven event that reduces uncertainty and provides evidence that a program is on the right track.

In the biopharma industry, value is not created linearly over time. Instead, it is built in significant, step-like increases that are directly tied to successfully reaching inflection points. A program’s value remains relatively low through early development. It accelerates dramatically after the successful completion of phase 2 trials, as this Phase is often considered the proof-of-concept stage.

A company wants to manage its cash so that it is not forced to fundraise before it completes Phase 2 of the drug’s clinical trial, since at that point its drug is significantly more attractive to investors than it was before.

From Alain Eudarcic’s presentation:

Stage	Probability of Technical & Regulatory Success	Risk-adjusted Net Present Value \$M	Cumulative R&D Spend - \$M
Preclinical Start	7%	\$1M	--
Phase 1 Start	9%	15	\$15M
Phase 2 Start	19%	89	43
Phase 3 Start	59%	447	108
NDA Submission Start	90%	1,188	390
End (successful)	100%	1,441	393

Understanding the Market Landscape

Strategy must be grounded in a realistic understanding of the market. Eudarcic presented an example of a biopharma company that made an inaccurate assessment and ended up being

The first drug to market captures 100% of the initial market share. After the second drug enters, the first drug's share drops to 58%, while the second entrant captures only 42%. Whichever company comes in second takes a significant hit to market share. A company that is second to market cannot make up for the penalty of being late to the game.

Crafting the Message

Compelling data are necessary to support the investment case. These data, combined with a well-rounded message, are even more persuasive. Eudarc identified three elements that, when combined, compose the most convincing message. These are:

- Logic: complex scientific results, disease statistics, clinical trial details
- Trust and credibility: acknowledgement by a KOL or known organization, selection for a prestigious conference
- Emotions: patient testimonials, stories of unmet medical need

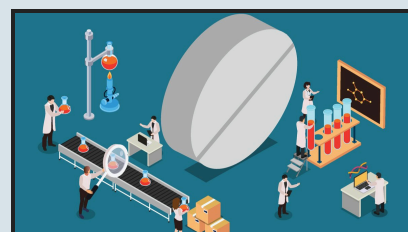
The goal is to create a message that is factually sound, credible, and memorable.

Conclusion

The biopharma industry is characterized by staggeringly high costs, high failure rates, and rising costs as programs progress through late-stage clinical trials. Given these conditions, companies must time their financing activities around the strategic inflection points. Meeting a successful milestone, especially the end of Phase 2, reduces uncertainty and makes the drug much more attractive to investors and partners, which in turn unlocks financing to proceed to the more expensive stages of development. Failing to reach a milestone can mean running out of cash and the end of the road for a promising drug.

AI Agents: Accelerants for Drug Discovery and Commercialization

On November 12, 2025, the HSI lunchtime seminar series featured Sloan alums [Dr. Harison Hong](#), Executive Director and Brand Lead at [Astria Therapeutics](#), and [Tim Sun](#) of [Google's Cloud AI GTM](#) team, who discussed the role and impact of AI in the pharmaceutical industry's development and sales cycles.



One of the speakers cited a McKinsey report that estimated that AI is poised to generate between \$60 and \$110 billion in annual value across the pharmaceutical value chain. AI can be applied to some of the most confounding challenges in discovery, clinical trials, and commercialization. The salient points of the wide-ranging conversation about AI applications are

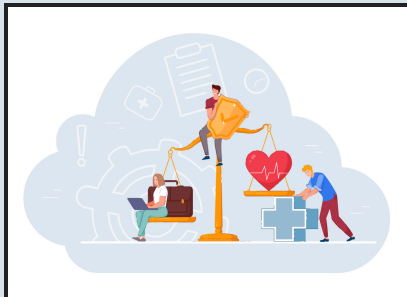
PHASE	CHALLENGE	AI APPLICATION	DESCRIPTION
Drug Discovery	Generates vast amounts of proteomic, genomic, and molecular data	AI Research Co-Pilot	Use AI agents to digest copious amounts of literature and data to help researchers develop new hypotheses and research directions.
	Choosing which molecules to test	Generative Molecular Design	AI tools to design new molecules that have specific properties
Clinical Trials	Recruitment of a diverse group of appropriate patients	Intelligent Patient Recruitment	Combine large EHR data sets with genetic data to assemble diverse and representative patient cohorts.
	Creating the required lengthy clinical trial protocols and study reports is time-intensive and uses up significant resources	Automated Report Generation	Use LLMs to generate first drafts of complex documents, significantly reducing manual effort.
Commercialization	Using similar engagement strategies across targets	Personalized HCP Engagement	Use comprehensive data analysis to make interactions with HCPs smarter and more personalized.
	Lack of knowledge/not enough time to find and digest information	Advanced Business Intelligence	Deploy AI agents to track competitors' drug development, monitor publicly available sources, and identify novel therapeutics.

The seminar speakers also talked about the challenges to AI adoption. One major decision facing companies is “build versus buy,” a challenge they face with nearly every technological innovation. It is not specific to AI implementations.

The biggest block to AI adoption is not the technology but the human element. Mobilizing people to adopt new methods is often more complicated and challenging than implementing the technology itself. Organizations will have to address employees' fear of being replaced by technology, inertia toward changing long-standing practices, confusion about the benefits of the new technology, and a lack of clarity about the impact of the change on performance appraisals.

also need to keep in mind the human element that bedevils any introduction of new technology.

Designing Wellness That Works: Insights from HSI Researchers and Industry Leaders



On October 23, 2025, HSI held its fourth annual workshop focused on Employee Population Health and Wellness. Once again, HSI collaborator [Well](#) sponsored this event. In 2021, HSI established the [Lab on Employee Population Health](#) to study employee wellness programs and conduct rigorous, evidence-based research to identify which programs and program characteristics lead to real improvements in employee wellbeing, productivity, and healthcare costs. There is much anecdotal evidence about such programs, but despite high spending on these benefits, there is little actual evidence about what works and why.

HSI researchers collaborate on these projects with large, self-insured employers and with smaller companies that offer innovative services and software to these employers. At this gathering, we presented results from some of this work, demonstrating evidence in action. Our collaborators, [Quest Diagnostics](#), [SilverCloud by Amwell](#), and [Well](#), along with HSI researchers, also presented their research, which uncovered several surprises about how small changes and a consumer perspective can lead to more robust offerings.

Research Highlights

Treat wellness like a consumer good.

Well combines consumer science and healthcare expertise into insights that translate into daily, personalized nudges to prompt clients toward healthier actions. These are personalized since different people respond to various incentives. While some rewards can be earned right away, others take sustained engagement. Habit formation and behavior change are more likely when a combination of short-term, medium-term, and long-term rewards is offered.

[Ruben Sigala](#), Well's Chief Marketing, Data & Analytics Officer, comes from a background in consumer goods and experience. Sigala notes that modern consumer engagement is a high-touch business. Under his leadership, the company's platform emphasizes consumer-centric models that incorporate the science of nudges. As a result, Well boasts enviable customer engagement rates compared to other companies in its industry. MIT Sloan HSI researchers will be working with Well and exploring their (de-identified) data to see what questions they can investigate.

the data, to conducting prospective studies, to performing rigorous analysis to test a hypothesis, to drawing conclusions, and then translating those results into action. Sometimes, as in one of HSI's projects with SilverCloud, researchers even develop innovative analytic methods to yield actionable insights.

HSI's academic research is more akin to research and development than to consulting or marketing and analytics. Collaborating with HSI provides unique insights unavailable elsewhere, particularly when compared to a traditional consulting engagement. The process of formulating the appropriate questions and conducting evidence-based analysis means there is far less danger of jumping to obvious conclusions or confirming prior biases.

If translational medicine is the incorporation of bench and lab research into treatments and solutions that help patients, perhaps what HSI offers is translational management. Hard-won, innovative insights can be applied to some of the most intractable healthcare challenges, resulting in better health for employees and employers. HSI researchers and collaborators are turning empirical evidence into new business models and practices that yield superior results to the status quo.

Visit our website for the full article, [Insights from the 2025 HSI Lab Workshop on Employee Population Health](#).

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EVENTS

Announcing the Annual MIT Sloan Healthcare and BioInnovations Conference

This year's theme: [Reshaping Healthcare in the Face of Disruption](#)

February 27, 2026 | MIT Media Lab

The MIT Sloan Healthcare & BioInnovations Conference is an annual event that brings together industry, academic, investment, and policy leaders from across the healthcare ecosystem to discuss key issues in healthcare. The 2026 conference theme, "Reshaping Healthcare in the Face of Disruption," explores groundbreaking developments across the healthcare landscape.

For more information and tickets, please go to the [SHBC home page](#).



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