

FOSTERING ENTREPRENEURSHIP IN HEALTHCARE AND LIFE SCIENCES

A Toolkit for Effective
Health Innovations



Research and advising from
Babson Advisory experts

**WILJEANA GLOVER
AND ALIA CROCKER**

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Fostering Entrepreneurship in Healthcare and Life Sciences

A Toolkit for Effective Health Innovations

Babson Executive Education has created a toolkit for companies, organizations, foundations, executives, and medical providers that crystalizes proactive steps you can take to bring entrepreneurship and innovation to the healthcare and life sciences space. This toolkit is designed to empower you simultaneously to create economic, social, and health value as you develop, implement, and scale health innovations. This toolkit stems from Dr. Wiljeana Glover and Dr. Alia Crocker's research and consulting in the United States and abroad. It provides insights into how to apply a new lens to health-related entrepreneurship and innovations.

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Research and advising from Babson Business Advisory expert and Associate Professor of Operations and Information Management,

WILJEANA GLOVER



Dr. Glover is a health innovation expert and healthcare entrepreneur. She has expertise in healthcare systems innovation and improvement, scaling operations, and experimentation and problem solving. Dr. Glover has conducted research in a variety of countries, including the United States, Mexico, Israel, South Africa, and Haiti. She develops training and action plans for corporations, organizations, foundations, and executives based on her research in how improvement and innovation practices can achieve more effective and equitable outcomes in healthcare settings using a systems perspective.

Before joining Babson, Dr. Glover worked as a consultant with healthcare consultancy Stockamp and Associates, implementing revenue cycle and process improvements in hospital settings. She is also co-founder and COO of Match Medical Practice Solutions, a healthcare revenue cycle management firm.

Associate Professor of Strategy

ALIA CROCKER



Dr. Crocker brings experience from both the academic and business communities. Previously, she worked in management consulting, where she focused on healthcare. She worked with clients in biotech, pharmaceutical, and medical device companies on projects including market analytics, brand planning, licensing, forecasting, and commercial effectiveness. Her research focuses on strategic management, with an emphasis on the integrated role of human and social capital in absorptive capacity-based outcomes. Her current work focuses on understanding organizational performance as well as learning and agility through examining strategic human capital resources and social networks.



» MEASURING OPPORTUNITY FOR ENTREPRENEURSHIP IN HEALTHCARE AND LIFE SCIENCES

The health sector is 20 percent of U.S. GDP.

Yet the United States tends to rank last in terms of health outcomes when compared to other high-income countries. Health is also a central pillar in the U.N. Sustainable Development Goals (SDGs): “Ensure healthy lives and promote well-being for all at all ages.” Yet by 2030, there will be a \$371 billion annual investment gap for health SDGs in low- and middle-income countries.

This gap can't be filled by government alone. Foundations, private funders, and businesses are needed. With COVID-19 bringing health needs, disparities, and capabilities to the forefront, investment in health products, services, innovations, and entrepreneurial ventures continues to increase. Now is the time to build a new and more effective method of innovation and entrepreneurship in healthcare and life sciences.

Source: The Commonwealth Fund, Mirror, Mirror 2021; SDG 3; USAID's Center for Innovation and Impact

»» DEFINING HEALTH ENTREPRENEURSHIP

The areas of opportunity for true health entrepreneurship are within the broad categories of devices, drugs, digital health, and care delivery. Entrepreneurship in this space is as much of a process as it is a product or service.

Three key components for success and impact

1. Build specialized venture teams and empower them with innovative and evidence-based value creation processes
2. Leverage unique business models
3. Achieve multiple stakeholder outcomes simultaneously while ultimately providing value to patient populations

Source: "Defining Healthcare Entrepreneurship: A Delphi Study," by Wiljeana J. Glover, Alia Crocker, and Candida G. Brush, Academy of Management Annual Meeting Proceedings



» HEALTH ENTREPRENEURSHIP REQUIRES A SPECIALIZED APPROACH

Use Systems Thinking for Complex Problems

Consider the complicated task of being an entrepreneur in space travel—we're talking literal rocket science. But put within the context of entrepreneurship, how difficult is it to build a rocket versus address a pandemic? Building a rocket is complicated but executable via using clear processes and component parts.

A health challenge such as addressing a pandemic, on the other hand, is complex; it can't be broken down into piecemeal parts. Instead, we have to consider issues holistically. It's impossible to apply a formula that has worked in other settings, as there is dissimilarity within different patients and populations. Therefore, it's important to leverage systems thinking and have generative relationships across multiple stakeholders.



» UNDERSTANDING HEALTH AS A CREDENCE GOOD INDUSTRY

Credence goods have qualities that the consumer can't evaluate after purchase, making it difficult to assess the utility and value of the good.

A key factor that should influence entrepreneurship of credence goods is the asymmetrical nature of knowledge between producers/providers and consumers.

Asymmetrical Knowledge in Health

Consider the vast difference between what a doctor knows and what a patient knows about treatment options and providers. This asymmetry might cause inefficiencies, such as overtreatment or undertreatment. Sometimes the ventures that get funded have a bias toward the seller's knowledge and opinions versus those of the patient. The most useful ventures may not get funded because of this information gap.





» APPLYING A NEW LENS TO ENTREPRENEURIAL VENTURES IN HEALTH

It's important to consider core entrepreneurship factors of healthcare ventures through the specialized lens of a credence good:



Who are the right actors?



What are the right processes?



What outcomes are we really hoping for?

» STEP ONE: START WITH THE ACTORS

How can you address knowledge asymmetry and account for the complex adaptive systems of the healthcare space? Multistakeholder knowledge sharing is key. You'll need to build specialized venture teams that have medical, scientific, and business expertise.

CASE

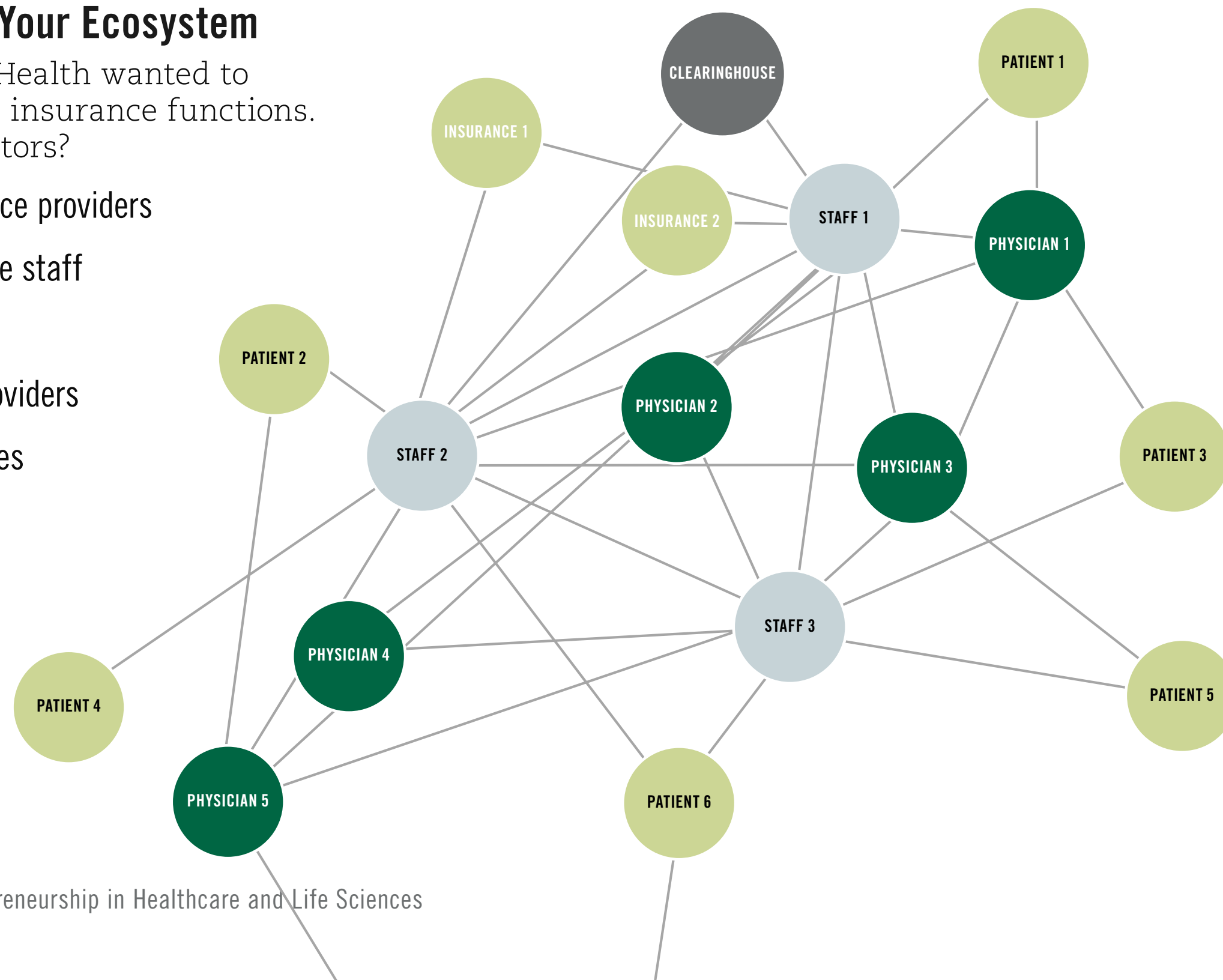
DOCK HEALTH

Dock Health is a HIPAA-compliant task management platform built by healthcare providers. These providers saw a need to streamline the management of administrative and clinical tasks to improve care and care delivery. Dock Health works with a large mental health clinic with 40 medical service providers and 13 administrative staff to manage onboarding, scheduling, records, billing, insurance provider management, and more.

Build Your Venture Team to Reflect the Actors in Your Ecosystem

Let's say Dock Health wanted to automate some insurance functions. Who are the actors?

- Medical service providers
- Administrative staff
- Patients
- Insurance providers
- Clearinghouses



Babson's Role at Dock Health

Babson supported Dock Health in analyzing the data Dock Health collected to reveal 1) how tasks are done and 2) make recommendations on which tasks to automate.

How to Fill in the Gaps for Seamless Multistakeholder Knowledge Sharing

Specialized venture teams help account for the intangibility, complexity, and uncertainty of the ecosystem; however, it isn't always realistic to involve a representative of every single player. To account for the inevitable gaps in your venture team, you'll need to be aware of and leverage three key networks:

1. **Technological networks**
2. **Environmental networks**
3. **Venture networks**

In the case of COVID-19, for example, staying hooked into these networks allowed Dock Health to adapt to the swift changes in what was allowed and possible around telehealth delivery.

Sources: "Identifying Patterns in Administrative Tasks through Structural Topic Modeling," by Dessislava Pachamano, Wiljeana Glover, Zhi Li, Michael Docktor, and Nitin Gujral (JAMIA)

"The AI-Enhanced Future of Health Care Administrative Task Management," by Wiljeana Glover, Zhi Li, and Dessislava Pachamano (NEJM Catalyst)

» STEP TWO: BUILD INTENTIONAL PROCESSES AND ACTIVITIES

After you've built your specialized venture team and established pathways for multistakeholder knowledge sharing, you'll need to:

- Develop an evidence base and manage risk with regularly enhanced, ethically regulated processes
- Leverage your specialized venture teams for coproduction of innovation and processes all the way from scientists to end users
- Select and develop a profit-generating business model, no matter if your venture will be structured as a nonprofit or for-profit one

When starting a venture in a health industry, you have to consider:

1. How to gather and build the evidence base for your venture
2. How to communicate that evidence and the benefits to: Investors vs. Buyers vs. End users

CASE

KRONOS HEALTH AND ON BELAY HEALTH SOLUTIONS

Kronos Health is a primary care provider focusing on holistic and value-based care for low- to middle-income (LMI) and elderly patient populations. Kronos aims to provide better, more accessible, affordable care. At Kronos, patients can see their MD, get hypnosis, receive chiropractic care, access behavioral health service, and more.

One of the founders of Kronos is also a co-founder of On Belay Health Solutions. On Belay helps Kronos access value-based contracts with Medicare and other health insurance providers to create the best deals and insurance structures to support patients.

At the start, most potential patients may not understand how this provider differed from other providers. Kronos needed not only to provide value-based care but to reconnect with their end user to understand their knowledge base and needs—and communicate and provide new services and interventions specific to their patient population.

From Medical Expertise to Innovation with Babson

Dr. Scott Early, co-founder of Kronos Health and On Belay Health Solutions, received his MD from Dartmouth Medical School and did his Family Medicine Residency at Group Health in Seattle, Washington. While completing his MBA at Babson, Scott drew on the knowledge and expertise of BEE experts to pursue his dream—to create a model that redesigns primary healthcare delivery.

Include the End User in Stakeholder Knowledge Sharing

Don't Stop at the Buyer: A venture has a much greater likelihood of success if it incorporates knowledge beyond that of the buyer. Frame your venture all the way through the chain to reach the needs, experiences, expectations, and knowledge of the end user.

Communicate on Evidence-Based Development: Demonstrate a strong evidence base of the value and effectiveness of your venture to the end user when you release solutions into the market.

Pitching Is Important: It doesn't matter how amazing your venture is if the end user doesn't understand its value or use. Include a strategy on how to pitch the device, drug, service, or delivery method to the end user to make sure it is used and used properly.

» STEP THREE: PLAN FOR MULTIPLE STAKEHOLDER OUTCOMES

Investors are exhibiting an increasing interest in opportunities with a dual bottom line: economic and social value.

- 6x increase of total U.S. Assets Under Management (AUM) using Environmental, Social, and Government (ESG) criteria in 10 years
- 26% of all professionally managed AUM emphasized ESG criteria
- High-income countries with the best health outcomes balance healthcare and social service spending. This suggests for the best financial RoR for a health intervention, it should be coupled with a social intervention.

Sources: US SIF Foundation, 2018 Report on US Trends; “Variation in Health Outcomes,” by Elizabeth H. Bradley, Maureen Canavan, Erika Rogan, Kristina Talbert-Slagle, Chima Ndumele, Lauren Taylor, and Leslie A. Curry (Health Affairs)

Simultaneous value creation in the healthcare space is not just possible—it’s ideal. Can your venture align the goals of healthcare researchers, healthcare providers, investors, and patients? The more stakeholder outcomes you account for, the more value your venture offers. This approach is most effective when your venture achieves multiple stakeholder outcomes simultaneously:

- Financial • Social • Health



CASE

BEYOND WIRELESS

Beyond Wireless provides Internet of Things (IoT) solutions to manage the temperature of critical vaccines, blood, insulin, and other temperature-sensitive pharmaceuticals. Through their cold-chain monitoring and control solutions, Beyond Wireless supports the world’s most vital healthcare organizations. And while Beyond Wireless is a for-profit enterprise, their measurement of health, social, and financial outcomes gives them a competitive advantage, particularly in our post-COVID-19 world.

For example, by being able to monitor the temperature of COVID-19 vaccine products in real time, they help to improve health outcomes while saving costs for their clients. By serving rural clinics in low- and middle-income countries, they help to fulfill the social missions of some of their largest clients, like UNICEF and the World Health Organization. This social orientation also allows the organization to consider other adjacent applications, such as air quality monitoring. These solutions are exemplary examples of doing well while doing good.

Source: Stoddard, Glover, and Mancha (2019), <https://hbsp.harvard.edu/product/BAB474-PDF-ENG>

Health Tech and Babson

Babson faculty worked with Beyond Wireless to develop a case, and its CEO, Ian Lester, remains engaged with the KMH Center as a speaker. Similar companies have engaged with BEE via staff trainings on incorporating health, social, and economic outcomes.

» ACCESS SKILLS AND MINDSET TRAINING FOR HEALTHCARE ORGANIZATIONS

Scientists innovate more when in the presence of entrepreneurs.

Babson Executive Education experts have designed many programs around this, including one that teaches existing life science ventures how to scale. This program served as the framework for the Babson Kerry Murphy Healey Center's NIH Grant-Winning program for early stage entrepreneurship in the life sciences.

Life Sciences Entrepreneurial Product Development Immersion for New Technologies and Solutions (L-SPRINT)

L-SPRINT leverages Babson's Entrepreneurial Thought & Action® method alongside customized healthcare and biomedical entrepreneurship content for the substance use disorder sector. Participants have an interest in generating, developing, and commercializing an idea.

- \$1.5 million National Institutes of Health (NIH) grant
- 4 cohorts of scientists, researchers, and providers over 5 years
- Ideas for solutions to substance abuse disorders
- Healthcare delivery, digital health, devices, and drug development



The Kerry Murphy Healey Center for Health Innovation and Entrepreneurship

The KMH Center leverages Babson's award-winning tradition of entrepreneurship and innovation to create health and economic value simultaneously. The center conducts research, facilitates experiential learning, and delivers advanced training. Center leaders also support those in the health entrepreneurship space through Babson Executive Education.

The Frank & Eileen™ Center for Women's Entrepreneurial Leadership

Healthcare entrepreneurship benefits from diverse insights. The Center for Women's Entrepreneurial Leadership (F&E CWEL) educates and empowers leaders to create social and economic impact through industry and innovation. Many accelerators, programs, and institutes are housed under F&E CWEL, including the Black Women's Entrepreneurial Leadership program (BWEL) and the Diana International Research Institute (DIRI), a premier global research institute and source of all research, policy, practitioner, and educator information for women's entrepreneurship.

» WE CAN HELP FOSTER ENTREPRENEURSHIP AND INNOVATION IN HEALTHCARE



Babson Executive Education experts know how to help companies, organizations, and foundations build a different model for healthcare—one based on systems thinking, multistakeholder knowledge sharing, innovative business models, and simultaneous value creation.

Practice Entrepreneurship with Economic, Social, and Health Outcomes

Babson combines experience in healthcare with a unique approach using Entrepreneurial Thought and Action.® BEE can help you at all stages of your venture, fusing your desired impact with the means at hand to help you learn, act, and build simultaneous value in the healthcare space.

[Learn About Entrepreneurship](#)

Build Strong Healthcare and Life Science Teams with Entrepreneurial Leadership

Our world is full of Volatility, Uncertainty, Complexity, and Ambiguity (VUCA). Healthcare and life sciences are especially subject to constant, unpredictable change. Helping innovators in healthcare develop an entrepreneurial mindset empowers them to navigate ambiguity and change.

[Learn About Entrepreneurial Leadership](#)

Establish Processes and Strategies for Growth and Innovation

Innovation in healthcare requires a balance of scientific and technical knowledge with strategic innovation structures and processes. Support your company leadership with a new understanding of how to innovate.

[Learn About Strategic Innovation](#)

Address Inclusive Leadership for Health Equity

Apply inclusive leadership to health equity for health improvement and innovation at three levels: the health ecosystem, the health organization, and the team.

[Learn About Inclusive Leadership](#)

Babson Business Advisory

Our faculty experts can advise and support execution on any topic healthcare and life sciences organizations, corporations, and innovators are struggling with. What we deliver is based entirely on your unique needs.



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Take Your Next Steps With Us



GET AN ACTION PLAN
FOR YOUR COMPANY



TALK TO OUR BUSINESS
DEVELOPMENT TEAM

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