



# **GO OUT AND INNOVATE!** PERSPECTIVES ON EDUCATING HEALTHCARE LEADERSHIP IN THE GOLDEN AGE OF INNOVATION

October 2021

**CAHME**<sup>®</sup>

Commission on Accreditation  
of Healthcare Management Education

# FORWARD





# CAHME<sup>®</sup>

**Anthony C. Stanowski, DHA, FACHE**  
President and CEO  
Commission on Accreditation of Healthcare  
Management Education (CAHME)  
Spring House, Pennsylvania, USA

My father was born to immigrants in the shadow of the 1918 influenza pandemic, raised during the Great Depression, and fought on the front lines of World War II. Like many from his generation, he innovated solutions with repurposed items out of necessity. During my childhood, I watched him reinforce our shed roof with discarded hockey stick shafts, and install a junk-yard cast-iron sewer pipe to create a basketball court. His solution was born of necessity: “Innovate!”

Today, we look into the abyss of a disease that threatens the world, and we see how scientists innovate. Using knowledge from nearly a half-century of research on gene function, scientists crafted a Trojan horse in record time to deliver vaccines containing the fragile messenger RNA (mRNA).

However, the distribution of COVID-19 vaccines was complicated by supply chain breakdowns which also affected the delivery of personal protective equipment, ventilators, and glass vials. Healthcare executives were reminded that innovation is not just technology, but it is in systems, processes, and leadership.

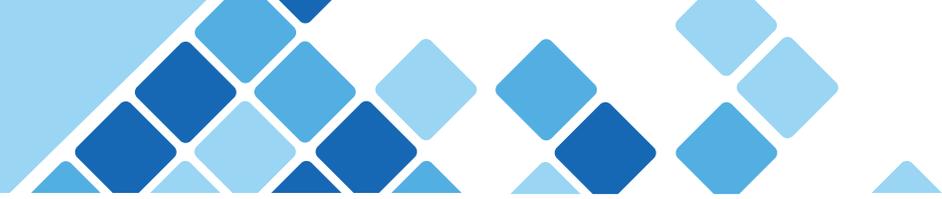
The CAHME Innovation Council — a group of multidisciplinary professionals featured in this paper — unanimously believes education is essential. In evaluating the competency domain of management and leadership, and learning from programs that prioritize innovation, we ask how do we develop competencies in future leaders to succeed in a period of uncertainty and ambiguity? What are critical knowledge, skills and attitudes? How do you review, examine, and evaluate innovation, and weigh the risk of success or failure from a personal, organizational and societal perspective?

We invited the council members to discuss the role of Innovation in healthcare management education. This paper summarizes their comments.

In closing, I share the sentiments of Michael Fosina, the Immediate Past Chairman of the American College of Healthcare Executives and president of New York-Presbyterian Hospital, who reflects: “My son Christopher wrote the following text to our family: ‘If you are ever upset about how things are going right now, remember that the end of the bubonic plague gave rise to the Renaissance, one of the greatest periods of art, literature, forward-thinking, and scientific discovery in human history.’” Christopher, we look forward to a new Renaissance, with optimism and hope. The answer is whispered from an earlier generation with seemingly insurmountable problems: “Innovate!”

# INNOVATION DURING THE COVID-19 PANDEMIC





## **MOST IMPORTANT COMPETENCY DOMAINS DURING COVID-19**

The pandemic provided an unexpected performance assessment for healthcare management education. What competency domain pulled us through the worst of this crisis? The answer is Innovation.

The success of every healthcare sector in 2020 relied on leaders to navigate their teams through COVID-19 challenges such as the shortages of beds, human resources, diagnostic and curative technology, and essential products.

The pandemic highlighted the prominent role of innovation as an essential part of healthcare management education. The National Center for Healthcare Leadership (NCHL) weaves innovation through competency domains, seeing it as “the ability to approach one’s work and the organization in new and breakthrough ways, including applying complex concepts, developing creative new solutions, or adapting previous solutions in promising new ways”.

## **HOW INNOVATION AFFECTED THE SECTOR PLACEMENT OF GRADUATES OF CAHME ACCREDITED PROGRAMS, 2016-2020**

While health care sectors are maintaining or increasing the number of graduates they hire from CAHME-accredited programs, the percentage of graduates is shifting by sector. In 2018-2019, 42 percent of graduates from CAHME-accredited programs were placed in hospitals and health systems, However, as the arrows in the pie chart below indicate, employment in them decreased over the past four academic years 2015-2019.

Employment in other sectors is increasing and some of the fastest-growing sectors seeking healthcare leaders include pharma, biotech, insurance, long-term care facilities, home health agencies, IT/Analytics, investment banking, and private equity. Physician practice management and consulting are significant slices of the pie, but their percentage of graduates has been steady reflecting perhaps a maturation in those sectors.

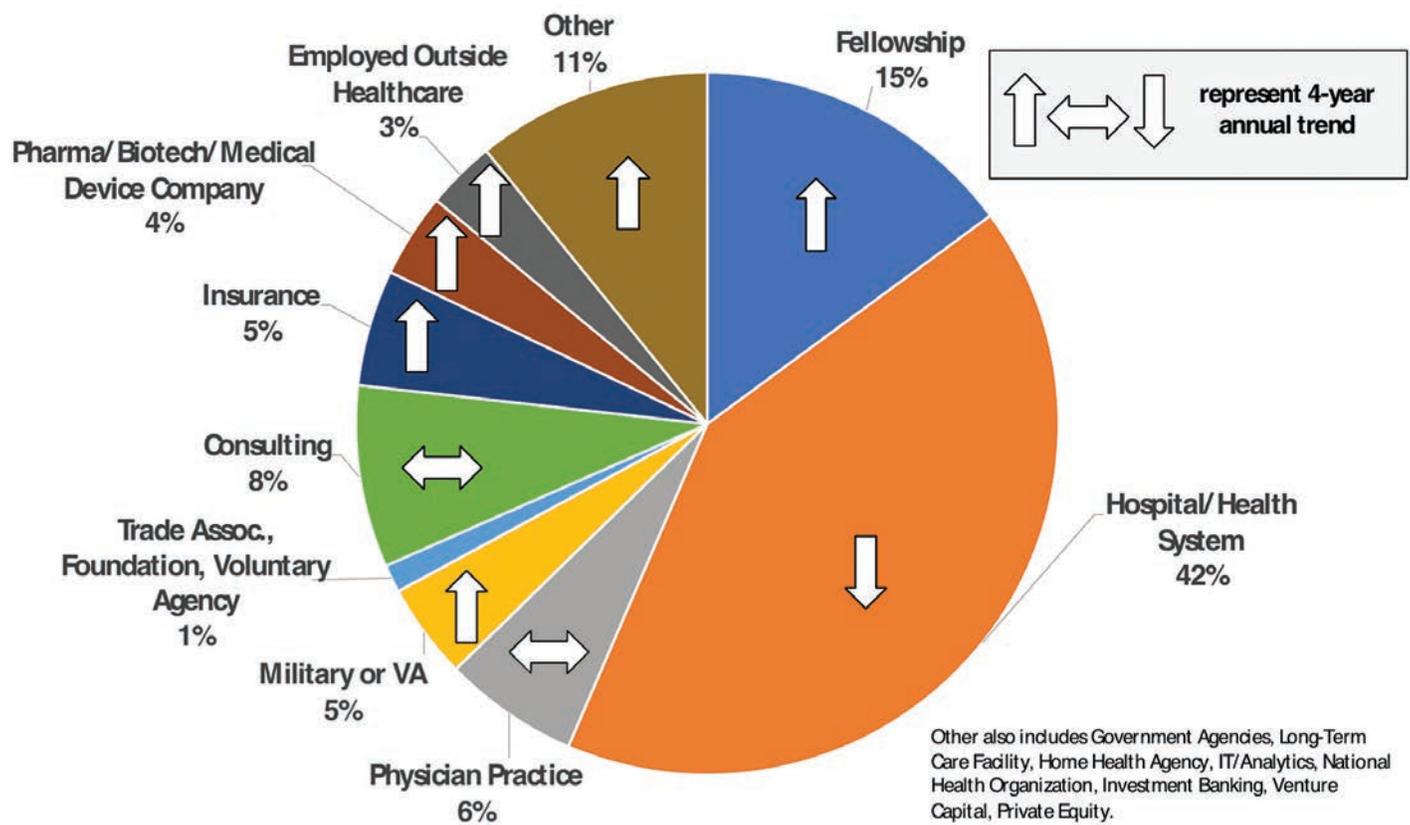
With competency-based education is core to CAHME-accredited programs, graduates are more than just good managers. The fastest-growing healthcare sectors see graduates from CAHME-accredited programs as innovative problem-solvers that use creativity, originality, and initiative to transform the healthcare system. Fields that require these competencies are growing faster than more traditional sectors and represent a greater diversity of opportunity for CAHME graduates.

# OPPORTUNITIES FOR GRADUATES OF CAHME ACCREDITED PROGRAMS

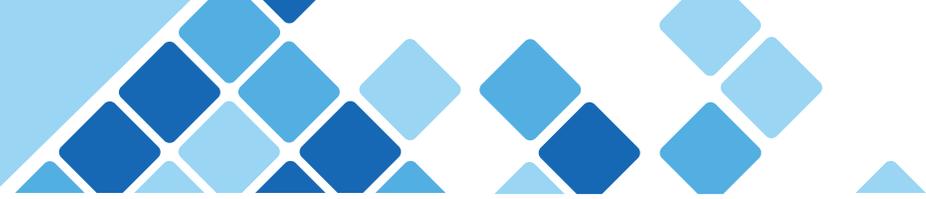


# SECTOR OF PLACEMENT OF GRADUATES OF CAHME ACCREDITED PROGRAMS

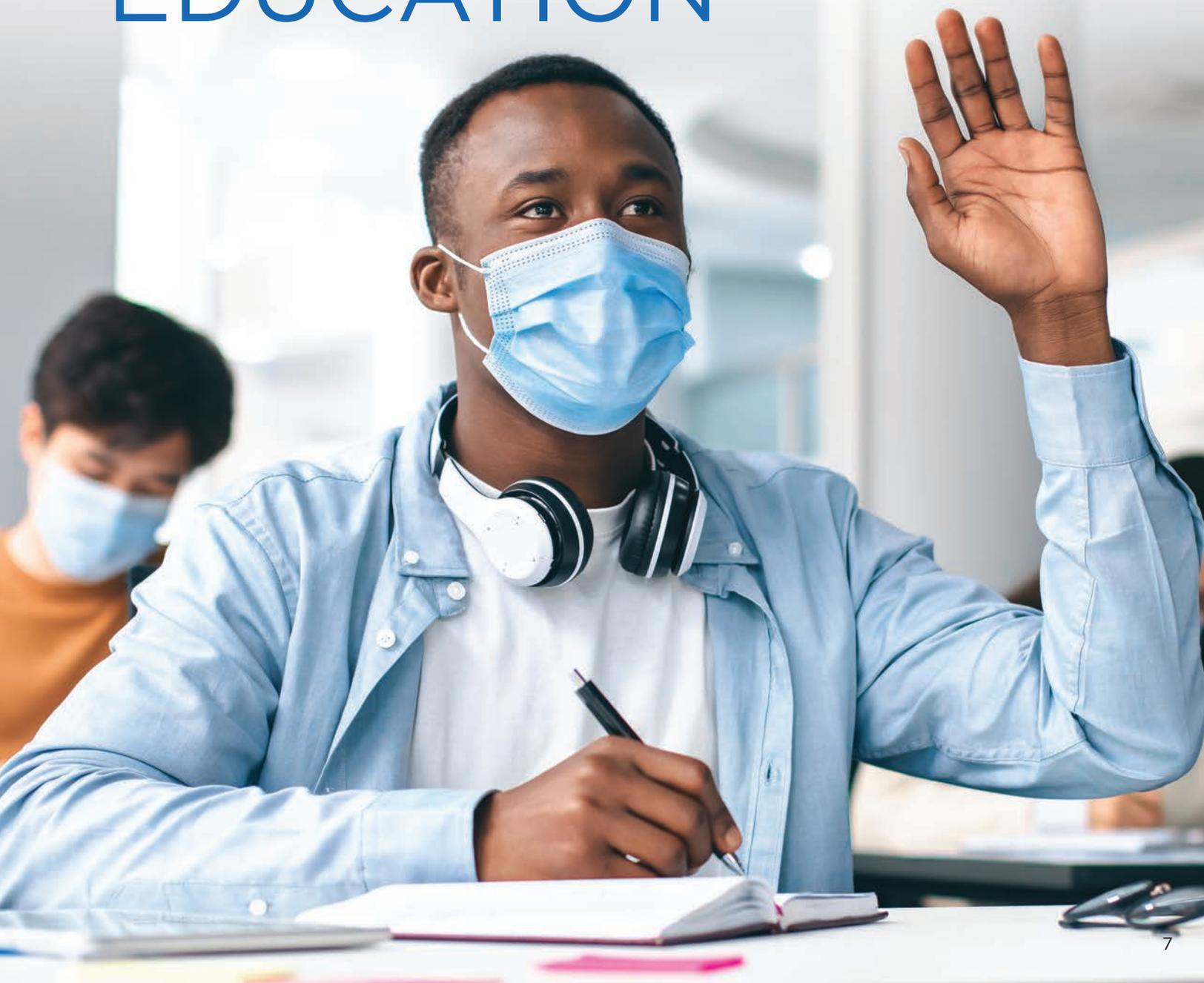
## 2018-2019



Source: CAHME Annual Program Reports 2016-2020.



# APPLICATION OF INNOVATION IN HEALTHCARE EDUCATION





TRINITY UNIVERSITY

**Edward J. Schumacher, PhD**

Department Chair & Professor of Health Care Administration

Trinity University

San Antonio, Texas, USA

At Trinity University, we emphasize the concept of innovation throughout our curriculum. We stress that creative problem-solving isn't something all people are necessarily born with but that it's a skill that people can develop. If you learn to exercise it like using a muscle, it will get stronger and easier over time.

Schooling systems have eliminated or deprioritized the arts, but creative students often come up with the most effective solutions for the toughest challenges. Unfortunately, many of us have been trained to use formulas and equations that are safe and known rather than taking risks with new and creative ideas.

Our healthcare management program is proud to be accredited by CAHME. Our innovation philosophy is congruent with accreditation standards. We support incorporating Innovation into the Leadership and Management domain because it gives more agency to teach through a lens of creative thinking while upholding high standards of educational program quality.

Another challenge we've faced is: how can we assess Innovation? Creating a project or a process is one thing, but how can a healthcare management program know a student has developed mastery of a creative mindset?

Our approach at Trinity University has been to integrate Innovation throughout the healthcare management curriculum and assess it at multiple stages. We do this by fostering students' abilities to be innovative thinkers and empathic listeners. For example, students are challenged to identify a current healthcare problem using a design thinking approach. We don't tell them the problems; we say: "Go find a problem." Then we ask them: "How do you know that's a problem?" which leads them to interview patients, family members, clinicians and others actually experiencing these problems. About 90 percent of any project is understanding the problem, and this format repeats across our curriculum. This process gives the students the freedom to pursue a problem they are passionate about solving. Over the years, we have seen students take on problems with the supply chain, health disparities, informal caregiving, operational efficiencies, patient experience, and more.

At Trinity University, we teach our students to create within a highly structured environment. We emphasize that Innovation isn't just one thing in their toolkit but a philosophy that prepares them to protect their organizations from risk using creative and empathetic problem-solving.



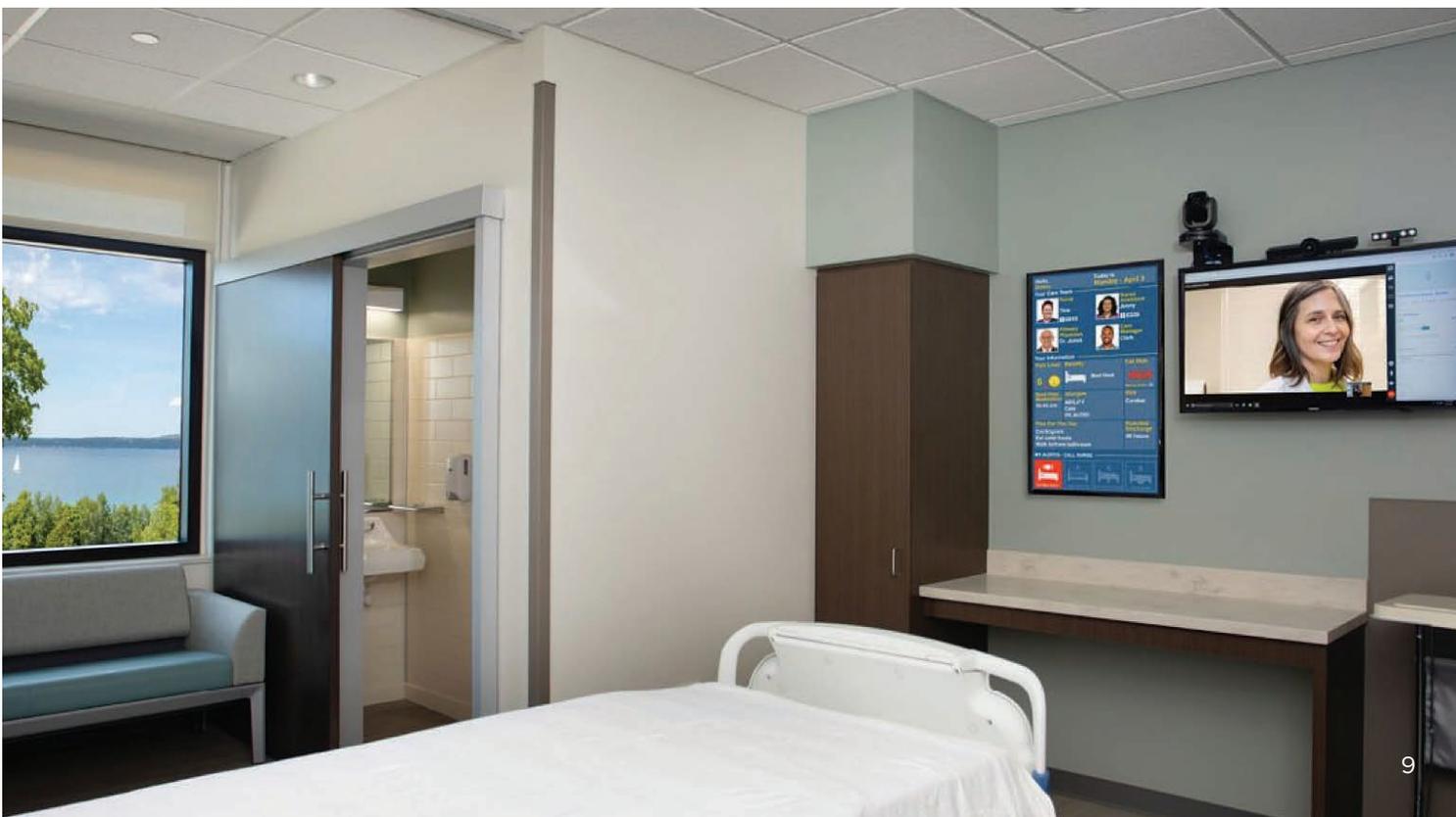
*CAHME President & CEO, Anthony Stanowski, pictured with Camden Shaw (left) and Justin Glenney (right), who presented their concept in 2019 at the Trinity Tiger Tank innovation competition (along with Justin Sanders and Taylor Miers, not shown).*

At the Trinity University Tiger Tank innovation competition, student teams “pitch” their own innovative concepts to a group of “investors” in a shark-tank like experience. Student learning at the competition enables students to understand not just the invention of a solution, but how to position it to be successful.

The 2019 competition included a pitch for a bedside communication solution similar to the industry leading company MEDI+SIGN. The students developed a concept that focused on how patients received empathetic care while allowing clinicians to spend more time with patients in treatment, and less in working through technology. The tool enables the display of patient data, schedule, care team information, all updated in real time. A mobile application allows patients to make requests and update their pain and mood levels as they see fit. The system also interfaces with patient beds and electronic health records and increases patient safety by preventing falls as well as other sentinel events related to HAC, among other CMS programs.

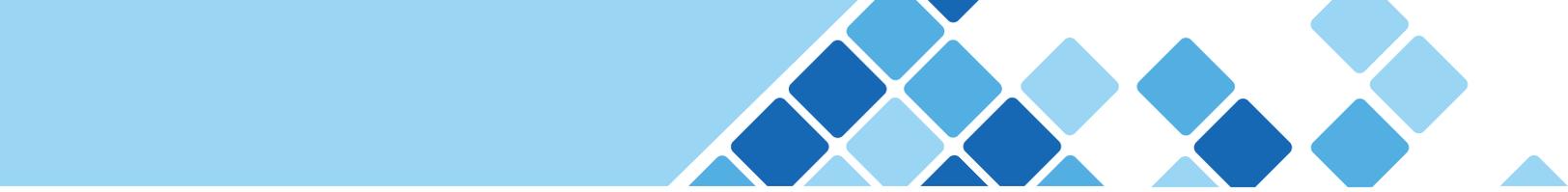
MEDI+SIGN has a proven and data-driven track record in hospitals and healthcare systems David Linetsky, Founder/CEO of MEDI+SIGN, said about the case competition: “It’s important that students learn both how to sell and how to evaluate new technologies. The development of new approaches to meet patient needs, and improve quality and safety is how we can improve healthcare.”

*The MEDI+SIGN implementation in a patient room.*





*Students, faculty, and innovators at the 2019 Trinity Tiger Tank in San Antonio, TX.*



# INNOVATION IN THE SUPPLY CHAIN





**Eugene Schneller, PhD**  
Professor WP Carey School of Business  
Arizona State University  
Phoenix, Arizona, USA

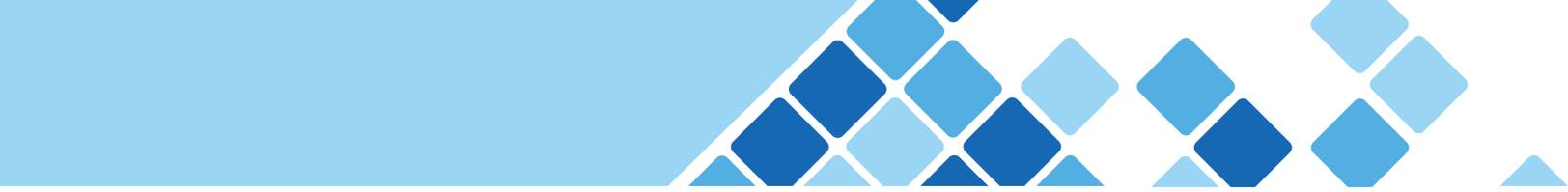
Preparing students to be innovators involves dealing with disruption. The pandemic accelerated using innovation to handle unpredictable disruption and demand. Before the pandemic, I would go to a party and say, “I do healthcare supply chain” and people’s eyes would glaze over. But suddenly, my field is seen as very important to laypeople and senior health care managers.

I teach at one of the larger supply chain departments in the country at the W.P. Carey Department of Supply Chain Management at Arizona State University. The program focuses not just on healthcare, but also on other industries. I have also taught health sector supply chain management to students at the University of Colorado’s executive program and to clinicians to ensure that they can evaluate and influence supply chain practice and innovation in their organizations. As supply chain is the second largest cost to a hospital after human resources, supply chain education provides students with the tools to help to manage and evaluate those who manage in this area.

Prior to the pandemic, the healthcare system’s supply chain management performed really well: distributors, group purchasing organizations (GPOs), and others did what they were supposed to do, supporting hospitals and systems utilizing just in time (JIT) and Lean methods as well as supporting their engaging in global sourcing of products. Prior to 2020, the importance of personal protective equipment and products such as respirators were not viewed as strategic products. COVID-19 demonstrated the impact that even products that were considered commodities can have on both patient care and clinician safety. Healthcare has been great at playing the short game — being prepared just in time. But many failed in playing the long game in supply chain, and it caught up with them during COVID-19. How many of us thought of nasal swabs and other things as strategic? And few anticipated that their suppliers, from across the seas, would be caught short.

<https://www.healthfinancejournal.com/~junland/index.php/johcf/article/view/250>

The flood gates have opened on the importance of innovation and its management in healthcare; preparing our students for innovation is essential to giving them the skills they need to succeed. I list some of them below from my experience in teaching supply chain innovation:



## INTERDISCIPLINARY INNOVATION COURSES

Moving supply chain from a procurement-based level to a strategic level was essential for success during COVID-19. For example, by bringing together health management, engineering, and nursing students they could study the comparative performance and value of products such as blood pressure monitors, glucose monitors, and defibrillators and their appropriateness for different settings. There are real differences in the perspectives of clinicians and engineers. Students need to know that successful leaders are able to facilitate interdisciplinary discussion, involving clinicians, technicians, and others.

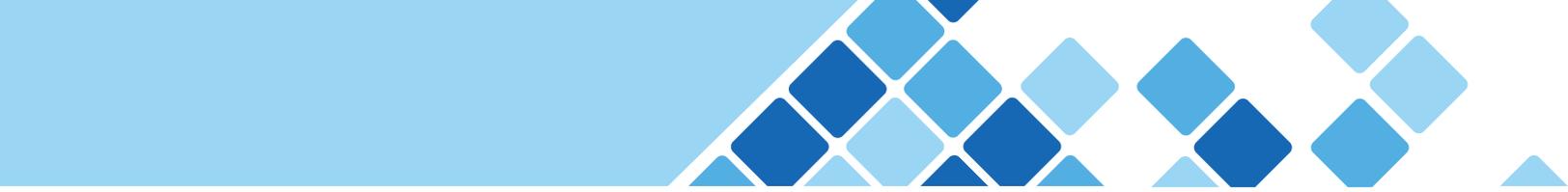
## INNOVATIVE INTERNSHIPS

Field placements should be evaluated as to their extent of providing experience around innovation. Students should ask critical questions to find out their potential responsibilities and role. While students like to get the major brands on their resumes, they need to beware of narrowly focused internships that fail to provide them with insights into the organizations in which they work. Yes, supporting data entry may be an important function during an internship, but unless the range of experiences is expanded, students will not be prepared for the complexities in the organizations in which they will eventually work. Through internships, students may receive experience dealing with innovative companies participate in the process of managing innovation.

Successful internships allow students to experience the theory of their coursework in action, to understand the product life cycle, to implement strategies, to break down barriers, and to serve on interdisciplinary teams.

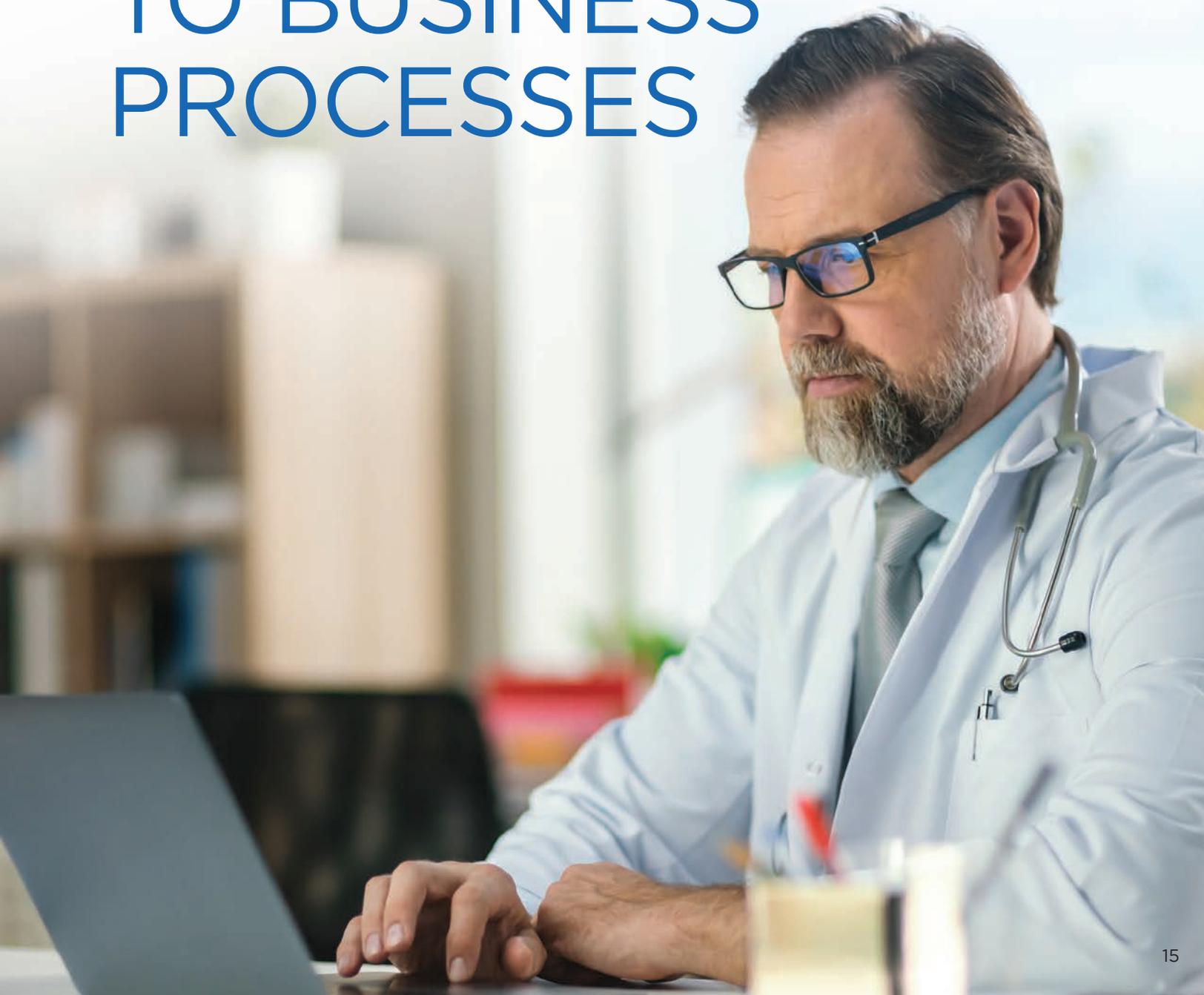
Experts believe that we will have a pandemic driven disruption at least every decade. Graduates of our programs, who will be the leaders of their organizations, need to be prepared to bullet-proof their organizations against the risks associated with future disruptions and innovate to buffer to mitigate continuing shortages. In short, senior managers should never be the weakest link in their organization's supply chain.

<https://www.fastcompany.com/90490010/if-we-dont-act-now-health-care-supply-shortages-will-continue-long-after-coronavirus>





# CONSULTING AND APPLICATION OF TECHNOLOGY TO BUSINESS PROCESSES





**Kaveh Safavi, MD, JD**  
Senior Managing Director - Consulting Global Health  
Accenture  
Chicago, Illinois, USA

There are four different competencies required to address innovation in healthcare leaders:

1. The discipline of innovation. Leaders need to be agnostic to any particular solution to the problem, and search for the best solution.
2. Affordability. At the heart of the paradox is the belief that innovation is expensive and will add costs that either the organization or the health care risk bearer can't afford, so incumbent organizations feel stuck. However, what innovators have discovered is that the only way forward is to innovate first in areas that create capacity to invest and then reinvest that money into areas of the business that are critical to long-term success.
3. Agility. Institutions need to become more agile in solving problems. A 20-year time frame is no longer acceptable.
4. Subject matter expertise. Leaders need to assemble the resources of subject matter experts to solve the problem.

We discovered that everybody says they should innovate, but nobody really gets any value because both business strategy and execution sit between an idea and a result. Those are themselves different domains, not necessarily the domain of the particular subject matter, but solving problems in a specific field does require some knowledge of that subject matter. The report offers suggestions for how healthcare innovation gains created in the pandemic can be transformed into long-term outcomes.

If a fundamental objective is to put people into the workforce fit for not just solving the post-COVID-19 problems of resilience, we need leaders with skills around innovation, business strategy, and operationalizing business strategy.

In Accenture's research report "Solving the agility vs. affordability paradox", they found that it is possible to turn the healthcare innovation gains made out of necessity during the pandemic into longer term outcomes. Successful organizations will capitalize on the opportunity to unlock trapped value by combining existing and emerging technologies to bring new solutions to market faster.

# IMITATE TO INNOVATE





**Quint Studer, MS**  
Studer Community Initiatives  
CAHME Board Member  
Pensacola, Florida, USA

When it comes to start-ups in healthcare, I tell people I'm not an innovator; I'm an imitator. Innovators develop brand new ideas, test them, and bear the burden of learning all the hard lessons along the way. Imitators create iterations that follow up from the original innovations. Imitators take ideas, scale them, and build upon the hard work, walking the trails blazed by innovators.

A lot of people think they have to come up with original ideas to be innovative. They let innovation paralysis prevent them from making progress. You don't have to be the first innovator; you can be an imitator and take what the innovator initially did and figure out how to make it better.

For a healthcare system to adopt innovation and successfully cut costs or solve problems, we have to answer three questions:

- Will it work?
- How will it work?
- How will it be paid for?

Innovating in healthcare is so hard. It seems simple, and we have many people trying it, but it's difficult for organizations and systems to know the difference between good and bad innovation.

Moving forward, we need healthcare executives, providers, students in all industries to rethink their approaches to innovation. By shifting to a possibility-oriented mindset, we can address problems, find solutions, and implement products and services that will save lives, improve social determinants of health, and bring down the skyrocketing costs of healthcare.

Quint Studer's new book, "The Calling: Why Healthcare Is So Special" (The Gratitude Group Publishing, Pensacola, FL, 2021) zeroes in on the barriers that hold us back from the pace of change. Examining the psychological and emotional defense mechanisms to organizational challenges, Quint focuses on how "replenishers" help to shift minds, techniques, and best practices to help move healthcare forward.  
<https://thegratitudegroup.com/the-calling/>

# INNOVATION IN MEDICAL TECHNOLOGY AND HEALTHCARE DELIVERY SECTORS





# Borna Health Fund

**Dr. Andrew Jay**  
General Partner  
Borna Health Fund  
Boston, Massachusetts, United States

Innovation is the key to the growth of the medical technology and the health care delivery sectors, which improve the lives of people around the world. New medical technologies make treatments faster, cheaper and better for the patients.

For a medical technology company and a health care delivery organization to survive, they need to constantly innovate and adopt new technology. It is critical that health care executives are educated about how to create, drive, and adopt innovation within their organizations.

The innovation can be new products such as the Neurospace devices for epileptic seizure prevention or iterations on long-standing devices such as the pacemaker. Iterating pacemakers has brought them from simple devices to amazingly complex and intelligent systems. The nature of these processes are slightly different, but the net effect is that they advance both the science of medicine and the economic health of the innovating company and the delivery site that adopts it through better care. A leadership team's failure to innovate neglects the company's valuable franchise and its customers.

Innovation of medical technology directly and indirectly drives a great deal of the education of actively practicing physicians, nurses, and other clinicians and health care executives.

Their education in creating, driving, and adopting medical technology innovation plays a vital role in advancing health care around the world.



*Neurospace Device*

# NECESSITY IS THE MOTHER OF INVENTION





# ROBINSONBUTLER

TRUSTED ADVISORS

**Tom Robinson, MBA**

Managing Partner & Co-Founder

RobinsonButler, LLC

Boston, Massachusetts, USA

Let's face it, old sayings are mostly true, that's why they're old sayings. "Necessity is the mother of invention" may be one of the oldest, and it's spot-on as without invention our world wouldn't be very comfortable or fun.

From the wheel to the recent private spacecraft created by Musk et al, innovation isn't just the invention of things, but the system and processes needed to sustain and support further invention... which has proven to always be needed.

To older folks raised in the 60's and 70's, our younger generations may seem to underappreciate all the work and innovation we produced during "our time", but the truth is that technology created in the last 20 years has spurred hyper-growth beyond anything we could have imagined. It seems limitless because it is.

Even our old "medical device" industry, which I've spent 40+ years in, has evolved into the medical technology space. Maybe the ultimate recent example of technology invading MedTech is robotic surgery pioneered by Lonnie Smith at Intuitive Surgical.

The innovation was the dream of having robots perform surgery, but the invention was not just creating the bots to do it but changing the hospitals, physicians, and the entire medical community to support this outrageous idea.

"Teaching" innovation seems near impossible, as most of us aren't that creative, but we need leaders to continue to poke the fire to keep our medical industry ahead of the outrageous growth curve of society at large... not an easy task. Let's raise a glass...and encourage them to never stop!

# THE LOGISTICS OF INNOVATION





# Penn Medicine

**Kevin Mahoney, MBA, DBA**

**CEO**

**University of Pennsylvania Health System**

**Perelman School of Medicine**

**Philadelphia, Pennsylvania, USA**

Students studying to become the future leaders of healthcare will be entering a highly disrupted industry. Now, as we emerge from the COVID-19 pandemic, people say, “This is the new normal” and “The world is never going to be the same.” In truth, COVID-19 accelerated the expansion of innovative and life-saving trends in changing healthcare delivery.

Innovation is essential as the health system of the near-term future will need to bring healthcare services to patients in the least expensive and most patient-centered locations. How can we provide care to patients at their home, near their home, in a digital platform, or in a virtual telehealth platform?

The focus is serving people where they are, more like how Jeff Bezos revolutionized the retail world through Amazon, and less as a central hub where people need to come to. Simply put, logistics is the key for innovation.

We need to reverse the mindset that high cost equals high value. Healthcare needs different thinkers, and when we are recruiting for positions at our health system, we are looking for those graduates who are prepared for the coming change... who think differently.

Here are two examples:

## **TELEMEDICINE**

The trend to telehealth was well-underway before COVID-19, but the pandemic accelerated it. In March 2020, we did 150 telemedicine visits in the first two weeks compared to more than one million telehealth visits in February 2021.

We managed several thousand patients at home with remote monitoring for COVID-19. We used a pulse oximeter, a blood pressure cuff, and a chatbot to check on them. This was essential with a condition like COVID-19 because a patient’s status could change very fast, from OK to crisis mode in a matter of minutes. Patients stayed at home using remote monitoring systems, limiting their exposure and wait times, coming into the hospital only if it was determined necessary.

## CHEMO-AT-HOME

Our patients didn't miss any chemotherapy administrations during the pandemic. Before the pandemic, we experimented with at-home chemotherapy treatment in small trial groups. This oncology experiment has grown into a treatment protocol that's here to stay. The chemo-at-home care option costs us a lot of money, but our nurses were willing to go into patients' homes during the pandemic to administer chemotherapy infusions.

Cancer patients are some of the most immune-compromised patients we serve. Providing them with an at-home treatment option in a pandemic kept them healthy and safe at home so they could focus on their recovery.

## SUPPORT FOR INNOVATION

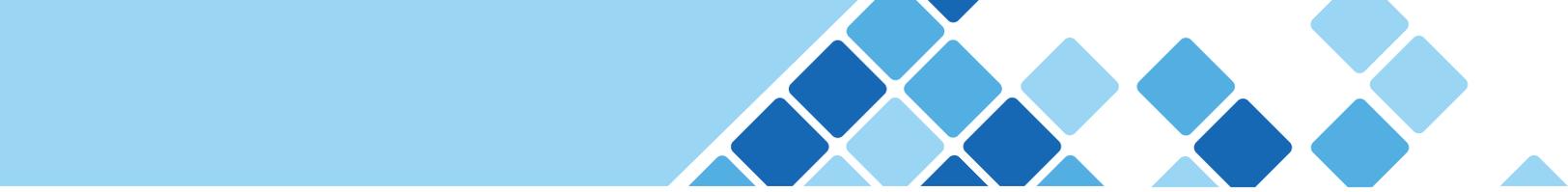
Like in other areas across the United States, several hospitals closed in the Philadelphia area. This is costly for patients and health systems and devastating for the community both in terms of pride, employment, and access to care. Further acceleration of hospitals closing requires more home care, more ambulatory care, and more virtual care.

The great graduate programs need to help support the movement toward evaluating and implementing innovation in health systems. Benjamin Franklin, one of the greatest American inventors in history, and our founder, said: "Without continual growth and progress, such words as improvement, achievement, and success have no meaning."

The graduate schools that teach healthcare management form the basis of learning key skills. We believe that innovating our way forward is the only way we're going to get America's healthcare spending down from 20 percent of the GDP to a more sustainable number for our society to grow.



Penn Medicine opened its new Interventional Support Center (ISC) early in 2021, the largest instrument processing and surgical supply preparation facility in the country. Off site from clinical campuses, more than 140 employees will serve 3 outpatient facilities and 2 hospitals, in its 110,000 square foot campus. Not only utilizing state-of-the-art technology, the facility represents an innovation in improving processing systems, while maximizing capacity for patient care."





# THE PILLARS OF HEALTHCARE INNOVATION



Co-founders Patrick Ohiomoba, CTO, Aparna Atluru, MD, MBA, Chief Medical Officer, and John Bracaglia, CEO, of Marvin: A Personalized Telehealth Approach to Mental Health. Marvin began as a student project at the Harvard Innovation Lab and expanded in Dr. Herzlinger's Innovating in Health Care courses.



## HARVARD BUSINESS SCHOOL

**Regi Herzlinger, DBA**  
Nancy R. McPherson Professor of Business Administration  
Harvard Business School  
Boston, Massachusetts, USA

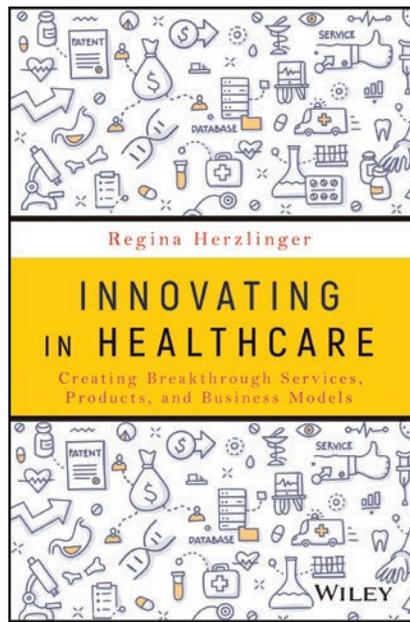
We are in the golden age of healthcare innovation.

Ironically, despite the devastation that COVID-19 wreaked, it also jump started many opportunities for innovation by filling up traditional sites for healthcare delivery and thus requiring alternative sites; demanding new medical innovations for diagnosis, monitoring, vaccination, and therapy; and energizing healthcare consumers' desire for empowerment and convenience.

Healthcare innovations like these are of great importance to society. Globally, healthcare faces a threefold crisis of unsustainable economics, erratic quality, and unequal access. In the U.S., healthcare costs accounted for 18 percent of 2020 GDP and will likely reach nearly 20 percent by 2027, while millions of people remain uninsured. From 2013 to 2018, U.S. health insurance premiums grew 20 percent, dwarfing the growth in overall inflation, 8 percent,<sup>1</sup> and precipitating a decline in employer-sponsored health insurance, thus reducing access to healthcare.<sup>2</sup>

Simultaneously, despite important medical technology innovation, U.S. quality of care, as measured by deaths preventable by readily available treatment, lagged other countries for conditions such as lower respiratory infections, coronary artery and kidney disease, high blood pressure, and diabetes.<sup>3</sup> These problems of excessive costs, unequal access, and erratic quality are mirrored globally.<sup>4</sup>

These problems represent massive opportunities for innovations that can do good — help society — and do well — succeed financially.



To analyze the case studies and develop a business plan, the students apply a framework about the Three Pillars that enable innovations. In Dr. Herzlinger's new book, *Innovating in Health Care: Creating Breakthrough Services, Products, and Business Models* (Wiley, 2022). <https://innovatinginhealthcare-book.com/>



**Some people confuse innovation with invention; but innovation is not merely invention. Others confuse it with the identification of problems and the public policies that should solve them. But health care innovation is mostly about the creation of organizations that can effectively implement do good- do well inventions.**

In the past, innovations took a long time to create; but the Internet and increasing computational powers are transforming the world much more rapidly today. Given the speed of change, it is exceedingly important for students to understand and address healthcare innovation opportunities promptly.

Some wonder if innovation can be taught. The below describes how I do it. The other essays in this document describe other great approaches and frameworks.

For the past 35 years, I have taught two courses about how to innovate health care at Harvard's Business School. One contains 28 field based cases about organizations that succeeded or failed in innovation. It attracts students from Harvard's Schools of Business, Engineering, Medicine, Public Health, and Public Policy, the undergraduate College, and MIT. They work together to learn how to replicate the success and avoid the failure these case studies depict and, as teams, to create a business plan for a health care innovation. The second course enables them to spend a full term on developing this plan. Along the way, they are mentored by the protagonists in the cases, who generally attend the case discussion, and by alumni of the course.

For example, a team consisting of a Google alum, an MBA/Md Psychiatrist, and a Master's student in Computer Science created the mental health app Marvin that, only one year after their graduation, won its series A funding. These courses have helped the creation of hundreds of additional health care innovations, including a few that reached billions of dollars in revenue.

The Three Pillars that support a successful healthcare innovation are:

## **PILLAR ONE: THE TYPE OF INNOVATION**

**Pillar One: Identifying what the innovation should accomplish.** Many innovators think their innovation can solve all healthcare problems — control costs, improve consumers' lives, and disseminate a technology. But it is virtually impossible to achieve all three goals simultaneously or even to achieve two of the three.

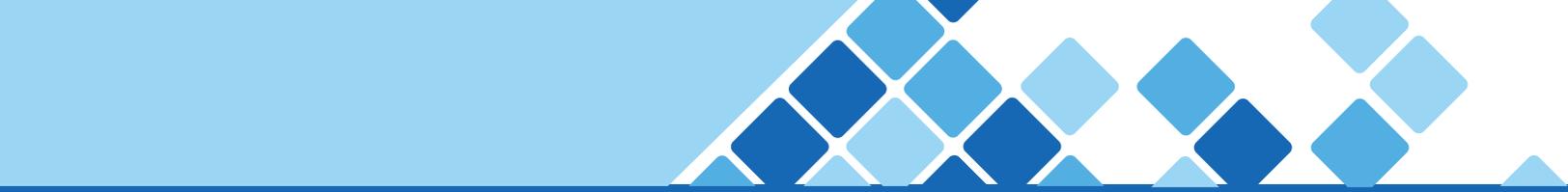
It is essential to clarify which one of these three goals the innovation is intended to effect — disseminating technology, increasing consumer convenience or empowerment, or cost-cutting.

## **PILLAR TWO: SIX FACTORS ALIGNMENT.**

**Pillar Two: Assuring that the innovation is aligned with the Six Factors in the environment that can make it or break it.** They consist of the *status quo* **structure**, the sources of reimbursement and capital **financing**; **public policy**; the demands for **accountability**; the various categories of **technology**; and **consumers**.

## **PILLAR THREE: BUSINESS MODEL ELEMENTS.**

**Pillar Three: Building a business model that contains the ten essential elements for a successful organization.**



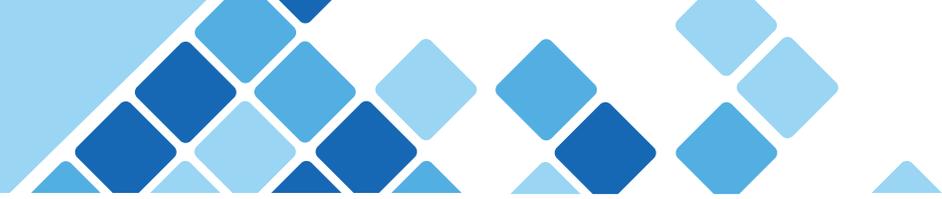
**LET'S GO OUT  
AND INNOVATE!**

George Herzlinger, PhD, co-founder with Professor Regina Herzlinger, of Belmont Instrument (now Belmont Medical Technologies), which makes the Belmont Rapid Infuser, a unique device that delivers heated blood quickly to people bleeding to death from gunshot wounds, accidents, postpartum hemorrhages, and victims of violence. Herzlinger is credited with other inventions, including an intraortic balloon pump (IABP) used as a bridge to transplant for those awaiting a new heart. It was the smallest and lightest IABP ever made. All told, the inventions coming from Belmont Medical Technologies are credited with saving millions of lives worldwide.



## NOTES

1. Henry J. Kaiser Family Foundation, "2018 Employer Health Benefits Survey," October 3, 2018: Figure 1.13, <https://www.kff.org/report-section/2018-employer-health-benefits-survey-section-1-cost-of-health-insurance>.
2. Agency for Healthcare Research and Quality, "Medical Expenditure Panel Survey 2017," October 2018: Exhibit ES.5, [https://meps.ahrq.gov/data\\_files/publications/cb22/cb22.shtml](https://meps.ahrq.gov/data_files/publications/cb22/cb22.shtml).
3. Lancet, "Healthcare Access and Quality Index Based on Mortality from Causes Amenable to Personal Health Care," July 15, 2017, [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(17\)30818-8](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(17)30818-8).
4. <https://www.healthypeople.gov/2020/topics-objectives/topic/global-health>.



# CONTRIBUTORS

Regi Herzlinger, DBA  
Nancy R. McPherson Professor of Business Administration  
Harvard Business School  
Boston, Massachusetts, USA

Dr. Andrew Jay  
General Partner  
Borna Health Fund  
Boston, Massachusetts, United States

Kevin Mahoney, MBA, DBA  
CEO  
University of Pennsylvania Health System  
Perelman School of Medicine  
Philadelphia, Pennsylvania, USA

Tom Robinson, MBA  
Managing Partner & Co-Founder  
RobinsonButler, LLC  
Boston, Massachusetts, USA

Kaveh Safavi, MD, JD  
Senior Managing Director - Consulting Global Health  
Accenture  
Chicago, Illinois, USA

Eugene Schneller, PhD  
Professor WP Carey School of Business  
Arizona State University  
Phoenix, Arizona, USA

Edward J. Schumacher, PhD  
Department Chair & Professor of Health Care Administration  
Trinity University  
San Antonio, Texas, USA

Anthony C. Stanowski, DHA, FACHE  
President and CEO  
Commission on Accreditation of Healthcare Management Education  
Spring House, Pennsylvania, USA  
[astanowski@cahme.org](mailto:astanowski@cahme.org)

Quint Studer, MS  
Studer Community Initiatives  
CAHME Board Member  
Pensacola, Florida, USA

**CAHME thanks our corporate members for their support in the golden age of innovation.**



## Universities Offering CAHME Accredited Programs in Healthcare Management

AdventHealth University  
Army-Baylor University  
Baylor University\*  
Boston University\*  
California State University, Long Beach\*  
California State University, Northridge  
Clarkson University Capital Regional Campus\*  
Columbia University\*  
Concordia University  
Cornell University\*  
Creighton University - Nebraska  
Dalhousie University  
Des Moines University  
Duquesne University  
Ferris State University\*  
Florida Agricultural and Mechanical University  
Florida International University\*  
George Mason University\*  
Georgetown University  
Georgia Southern University  
Georgia State University  
Governors State University  
Grand Valley State University  
Hofstra University  
Indiana University  
Johns Hopkins University  
Minnesota State Moorhead  
Medical University of South Carolina\*  
New York University\*  
Pennsylvania State University\*  
Portland State University  
Robert Morris University  
Rochester Institute of Technology  
Rush University\*  
Rutgers University  
Saint Joseph's College (ME)  
Saint Louis University\*  
Seton Hall University\*  
Stony Brook University\*  
Suffolk University\*  
Texas A&M University\*  
Texas State University  
Texas Woman's University\*  
The George Washington University\*  
The Ohio State University  
The University of Iowa\*  
Trinity University\*  
Tulane University  
Uniformed Services University of Health Sciences  
Université de Montreal  
University of Alabama at Birmingham\*  
University of Arkansas for Medical Sciences  
University of Central Florida\*  
University of Colorado Denver\*  
University of Detroit Mercy  
University of Florida  
University of Illinois at Chicago\*  
University of Kansas Medical Center  
University of Kentucky  
University of Louisville\*  
University of Memphis\*  
University of Miami\*  
University of Michigan\*  
University of Minnesota\*  
University of Missouri\*  
University of Nevada Las Vegas\*  
University of New Haven  
University of North Carolina at Chapel Hill\*  
University of North Carolina at Charlotte  
University of North Carolina at Wilmington  
University of North Florida  
University of North Texas Health Science Center\*  
University of Oklahoma  
University of Phoenix- Arizona  
University of Pittsburgh  
University of Puerto Rico  
University of Scranton\*  
University of South Carolina  
University of South Florida  
University of Southern California\*  
University of Texas-Arlington  
University of Texas at Dallas  
University of Texas Health Science Center at Houston  
University of the Incarnate Word\*  
University of Utah  
University of Washington-Seattle\*  
University of Wisconsin Milwaukee\*  
Virginia Commonwealth University\*  
Weber State University\*  
Xavier University\*

## CAHME Accredited Programs in Healthcare Quality and Safety

Georgetown University  
The George Washington University  
University of Alabama at Birmingham

## CAHME Certified Programs in Healthcare Quality and Safety

Drexel University  
Thomas Jefferson University  
University of Illinois at Chicago  
University of Pennsylvania

## CAHME Certified Programs in Population Health Management

Boise State University  
Lehigh University  
Johns Hopkins University  
Thomas Jefferson University  
West Virginia University

\*Universities offering multiple CAHME accredited programs.  
List represents status as of 6/27/2023

For the most updated and complete listing,  
visit [www.cahme.org](http://www.cahme.org)

# CAHME®

Awards Program

## CONGRATULATIONS YOU DESERVE

FOR EXCELLENCE IN HEALTHCARE EDUCATION & INNOVATION

The Commission on Accreditation of Healthcare Management Education (CAHME) is proud to announce the winners of the 7th Annual CAHME Awards Program.

Celebrate the award winners on Sunday, March 27, 2022 at ACHE congress. To learn more visit [CAHME.ORG](https://www.cahme.org).

### 2022 CAHME AWARDS FOR EXCELLENCE



CAHME/CANON SOLUTIONS AMERICA  
AWARD FOR SUSTAINABILITY IN  
HEALTHCARE MANAGEMENT EDUCATION  
University of Minnesota



CAHME/GEORGE AND REGI HERZLINGER  
INNOVATION EDUCATION AWARD



Trinity University (Gold Recipient)



Thomas Jefferson University (Silver Recipient)  
Florida International University (Silver Recipient)



CAHME/DAWN GIDEON  
FOUNDATION SCHOLARSHIP  
*Melissa DePaola, LMSW, MHA Candidate*  
Stony Brook University



CAHME/JUDY BAAR TOPINKA  
FOUNDATION SCHOLARSHIP  
*Brittany Morrison, MHA Candidate*  
Johns Hopkins University



*Yazmyne Melgoza, MHA Candidate*  
California State University, Long Beach



CAHME/TIM CAMPBELL SCHOLARSHIP  
*Jarrell Mahusay, MHA Candidate*  
University of North Florida

Modern  
Healthcare

Exclusive Media Sponsor for the CAHME Awards Program



CANON SOLUTIONS AMERICA

George and Regi  
Herzlinger  
Charitable Fund



RAISE THE BROW



CHARITABLE FOUNDATION

