

IGNITING CHANGE

INNOVATIVE CARE MODELS IN THE POST-ACA DECADE

A decade ago, innovation in health care was about designing new products and services. From medical equipment creatively designed to be more durable and affordable to outreach efforts using the latest mobile tech, these offerings have saved lives and brought costs down. But as impactful as they've been, it is not a new product or service that will ignite lasting, systemic change in health care—it is reinventing the care model itself. Now, we have the opportunity to do just that.

The 2010 passage of the Affordable Care Act (ACA) drew public attention to the challenges and constraints of our existing systems of care and settled key uncertainties around delivery design and access to coverage and benefits. And, by requiring person-centered care and funding innovative experimentation, it also united and amplified other forces—demographics, cultural norms, and technological advancements—chipping away at legacy delivery systems and outdated coverage models. The ACA catalyzed a new landscape, one in which we can experiment, innovate, and radically reinvent care models that restructure how talent, expertise, and resources like money, technology, and assets are organized.

HEALTH
FUTURES LAB



INSTITUTE FOR THE FUTURE

The post-ACA decade

offers an unprecedented opportunity for leaders in health care to affect change. It presents a landscape in which we can rethink assumptions, relinquish legacy practices, and combine promising experiments to remake health care at the systems level.

This foresight map is your guide to leading in this new landscape. It maps new care models that restructure how talent, resources, and expertise are organized. By exploring the innovative care models that exist today and the catalyzing forces that enable them, you can better anticipate change in the next decade. And by employing the six leadership strategies, you can support and scale innovative approaches to health and well-being.

FIVE CATALYZING FORCES ignited by the ACA are enabling the rearrangement and realignment of the elements of care—talent, resources, and expertise—across the health care system: integrative care, people-powered health, anticipatory interventions, radical transparency, and linked knowledge.

TWENTY-FOUR CARE MODELS offer the insights needed to drive sustainable, effective, and systemic change in standards for outcomes, quality, and affordability in health care. Each model is defined by a signal of change—a current example of a new model today. Each also shows how talent, resources, and expertise can be organized to improve health and economic outcomes. These models are organized into six target areas—care delivery, research and development, population health, plan and benefits design, and engagement. Use them to:

RE-DEFINE where care happens and who provides it

RE-DESIGN interventions to treat whole populations

EXPAND understandings of personal and community health

UNCOVER new arenas for thought-leadership

SIX LEADERSHIP STRATEGIES enable leaders to scale change. By empowering people, overcoming clinical and systems inertia, breaking false boundaries, moving upstream, creating data commons, and revitalizing the medical maker, leaders can innovate more sustainable care models in the future.

Five Catalyzing Forces

Dramatic changes in people's values and in technology have been reshaping the health care landscape for years. However, the incentives and imperatives of the ACA legislation unify and amplify their innovative potential. Together they form five catalyzing forces that allow us to reconfigure talent, resources, and expertise.

INTEGRATIVE CARE

Clinical medicine is integrating with social services to provide more systemic care that encompasses the biological, environmental, and social determinants of health. Leaders in health care who recognize the connection between social determinants of health and health care utilization and outcomes are working to create more robust links between the clinical delivery system and social services.

PEOPLE-POWERED HEALTH

The system-wide emphasis on patient-centered care is shifting the roles of people, their families, and caregivers from passive to active decision makers in health care choices. This change is propelling leaders to design care delivery protocols with the needs, preferences, and capabilities of individuals front and center for more effective prevention, treatment, and engagement.

ANTICIPATORY INTERVENTIONS

Advances in medicine and use of information technologies are moving health care away from a focus on reactive diagnostics and treatments toward an emphasis on personalized, anticipatory, and preventative care. Leaders inside and outside health care are experimenting with delivering salient information through mobile technologies and providing treatment and interventions outside clinical settings to prevent adverse health outcomes downstream.

RADICAL TRANSPARENCY

Technological and social forces are pushing information out of protected silos toward open transparency around everything from the true cost of R&D behind a new drug to physician referral patterns. The economic and social costs of inadequate, inaccurate, or inappropriate care are becoming better understood by a wider audience. This transparency is pressuring health care leaders and innovators to examine protocols and explore new ways to deliver more effective and compassionate care.

LINKED KNOWLEDGE

Big data, social media and online sharing platforms, translational science, and citizen-driven research are spreading knowledge from fixed hierarchies of expertise to linked experiences and collective wisdom. Specialists on the forefront of linked knowledge, including oncologists and surgeons, are moving away from physician-driven health care models toward collaborative modes of care delivery in which the patient is a critically important member of the care team.

Care Models for Systemic Change

CARE DELIVERY

Optimizing talent and technology to improve outcomes

SOCIAL FACTORS TRAINING

HealthBegins moves health care upstream by training health care professionals to address their patients' unmet social needs through social determinants interventions.



healthbegins.org

END-OF-LIFE BEST PRACTICES

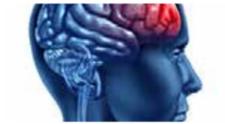
Led by Dr. Atul Gawande, the Serious Illness Care program at Ariadne Labs aims to provide guidance for clinicians to initiate difficult conversations and is creating and standardizing best practices for end-of-life care.



ariadnelabs.org

POINT-OF-CARE DIAGNOSTICS

BioDirection's Tbit system analyzes a single drop of blood using biosensing nanowire technology to detect possible concussions in 90 seconds.



biodirection.com

ASYMPTOMATIC INTERVENTIONS

With 150 of its tests costing less than \$10, Therasano aims to empower consumers by making lab tests, from fertility panels to allergy tests, affordable and convenient.



therasano.com

RESEARCH AND DEVELOPMENT

Breaking down academic silos to advance human health

SURVIVORSHIP CARE

The National Cancer Institute's Office of Cancer Survivorship is designing collaborative research efforts to create best practices to address the unique and poorly understood needs of patients and survivors.



oncology.nationalcancer.org

BLOCKCHAIN HEALTH

The Institute for Blockchain Studies is examining applications of blockchain technology in health and envisioning apps such as Personal Health Record Storage, Health Research Commons, Health Document Notary Services, and Doctor Vendor RFP Services.



blockchainstudies.org

PEOPLE-POWERED STUDIES

The popular online patient network PatientsLikeMe recently signed a research collaborative agreement with the USFDA to determine how patient-reported data can provide new insights into drug safety.



patientslikeme.com

CHRONIC CONDITIONS AND DEPRESSION CO-OCCURRENCE

The American Heart Association recommends routine depression screenings as part of cardiac care, yet further research is needed to turn mental health screenings into improved cardiovascular outcomes.



heart.org

PHILANTHROPIC AGENDA SETTING

Activating responses to urgent twenty-first-century health threats

PLANETARY HEALTH

The Rockefeller Foundation is raising public awareness and investing in establishing the pillars of a new public health discipline, planetary health, that will safeguard both human health and the natural systems that underpin it.



rockefellerfoundation.org

DEMENTIA-FRIENDLY COMMUNITIES

Dementia Friendly America raises awareness and provides education and training to create communities where people living with dementia, and their care partners, feel respected, supported, and included in everyday life.



dementiafriendlyamerica.org

COMMUNITY HEALING

The Center for Youth Wellness is creating a clinical model that recognizes the impact of adverse experiences on health and effectively treats toxic stress in children.



centerforyouthwellness.org

MICROBIOME RESEARCH

Leading scientists are advocating for creating a Unified Microbiome Initiative to bring together researchers and representatives from public and private agencies and foundations to advance microbial science and improve human and ecological health.



theatlantic.com

POPULATION HEALTH

Uncovering community health assets

RESOURCE MATCHMAKING

Lift Hero, which employs premed students as drivers for seniors, flips our assumption of scarce resources in health, expands the learning environment for health students, and prompts other matchmaking services to follow suit.



lifthero.com

FIRST RESPONDERS AS PCPs

The Community Paramedic Program offers a standardized curriculum that can be taught at accredited colleges and universities to prepare first responders to provide mental, oral, and primary health care services.



communityparamedic.org

CULTURALLY COMPETENT PROVIDERS

The Transitions Clinic Program employs trained community health workers who've been incarcerated to serve the primary care needs of some of the 10,000 former offenders released from U.S. jails and prisons weekly.



transitionsclinic.org

HUMAN NETWORK INTELLIGENCE

Combining field data and analytics, Metabiota investigates outbreaks in viral hot spots around the world and works with individuals, organizations, and partners to help provide strategies for stemming epidemics.



metabiota.com

PLAN AND BENEFITS DESIGN

Collecting, tracking, and using data effectively and responsibly

EMPLOYER-LED COLLABORATIVES

Working with claims data supplied by payers and homing in on simple fixes in care delivery systems, Intel's Healthcare Marketplace Collaborative helps implement best-practice clinical processes for treating common, expensive conditions.



intel.com

ALGORITHMIC IDENTITIES

AirSage aggregates signaling data from cellular networks to provide real-time data used by traffic planners and market researchers—and perhaps soon by insurance companies with an interest in gauging individuals' future health risks and needs.



airsage.com

UPSTREAM TESTING

For \$250, South African insurer Discovery Ltd offers members whole exome sequencing, followed up with a comprehensive report detailing their risks for specific diseases and potential strategies to modify those risks.



discovery.com

A-LA-CARTE OFFERINGS

The growing number of people with high-deductible health plans and significant cost-sharing will look to direct-to-consumer services such as home visits from doctors and nurses.



gethealth.com

ENGAGEMENT

Informing through timely, useful channels

PRECISION COMMUNICATION

Wellpepper supplies apps for providers to create digital treatment plans accessible to patients on mobile devices, making it easier to check in and communicate remotely with their health care professionals.



wellpepper.com

INFORMED TREATMENT DECISION-MAKING

MyCancerJourney supports an individualized approach to intensely personal choices by blending medical information with quality-of-life and cost information for each treatment option to generate patient-specific survival curves.



mycancerjourney.com

BURNOUT PREVENTION

Stanford Hospital's "time banking" program aims to ease work-life conflicts by providing support such as meal delivery, housecleaning, babysitting, and elder care, in exchange for time doing extra work such as serving on committees.



stanford.edu

ADAPTIVE HACKS

Liftware is a stabilizing handle that contains sensors to detect hand motion and connects to a spoon or fork attachment to help people with hand tremor eat independently and stay in their homes.



liftware.com

Leadership Strategies

Turning innovation into sustainable care models

The catalyzing forces for change in the next decade will produce promising business, care delivery, and research models in target areas of health care. But the innovative care models that emerge won't scale to become widespread without strong leadership. To replace existing models with more effective ones, leaders will need to amplify and reconfigure health talent, resources, and expertise by implementing the following strategies:



EMPOWER PEOPLE

The narrative behind consumerism in health places significant demands on individuals to do more to finance and take care of their own health. Leaders must help shift the burden to health care organizations to empower people with the right tools and support to make better decisions for their own health and well-being.



MOVE UPSTREAM

Transformative research continues to suggest that early and holistic interventions result in the most optimal health outcomes. As we gradually move away from a fee-for-service care delivery model, leaders must look for opportunities to leverage the most promising set of resources to deliver anticipatory person-centered care.



REVITALIZE THE MEDICAL MAKER

Nurses and other allied health workers and caregivers are the under-recognized innovators in health care. Leaders need to embrace and empower the creativity and ingenuity of frontline workers, home health workers, and those implementing workarounds in under-resourced facilities. They are the inventors at the forefront of the next generation of care.



BREAK FALSE BOUNDARIES

To achieve optimal health outcomes, leaders need to erase legacy boundaries that are no longer useful. Whether false boundaries separate mental health from physical health or the patient from the person, breaking them will enable resources and expertise to flow more effectively and propel new care models to flourish.



CREATE DATA COMMONS

The next decade holds the opportunity for health care to lead in using diverse data to personalize medicine and deliver smart population management. Without strong leadership, however, health care will fall dramatically behind other industries. Leaders must do more than be open to sharing data; they must co-create it.



OVERCOME CLINICAL & SYSTEMS INERTIA

Dr. Edward Wagner, who developed the model for chronic disease coordination, warns against the tendency to maintain current treatment strategies despite poor outcomes. In addition to clinical inertia, leaders must overcome systems inertia—the tendency to resist change at the systems level. By fighting health care systems' inertia, leaders can become the activists needed to transform health care.

POINT-OF-CARE DIAGNOSTICS

With the sensor revolution under way, rapid, affordable point-of-care devices for early identification of serious health issues will expand how and where diagnoses can be made.

BioDirection
biodirection.com



ASYMPTOMATIC INTERVENTIONS

Expensive, difficult-to-access laboratory tests triggered by a patient's symptoms currently drive 70 percent of all clinical decisions in health care, but more affordable and accessible tests will enable people to get tested before they show symptoms, resulting in earlier therapeutic interventions.

Theranos
theranos.com



HealthBegins
healthbegins.org



SOCIAL FACTORS TRAINING

In order to provide integrative care, physicians and other health care professionals will increasingly be trained in how to treat for larger socioeconomic determinants of health.

SURVIVORSHIP CARE

Over the next decade, 19 million Americans will be living with a diagnosis of cancer as a chronic condition, and millions more will be considered cancer survivors, calling for new care models for cancer patients and survivors.



Journey Forward
journeyforward.org



Institute for Blockchain Studies
blockchainstudies.org

BLOCKCHAIN HEALTH

The blockchain protocol could help accelerate the transition from centralized storage systems to transparent, anonymous external computation networks for storing digital health information.

CHRONIC CONDITIONS AND DEPRESSION CO-OCCURRENCE

With the link between mental health conditions and chronic diseases well established, a growing body of research supports listing depression as an important risk factor for heart disease, stroke, and diabetes.

Harvard Health Policy Review
hhpronline.org



END-OF-LIFE BEST PRACTICES

As the U.S. population ages (20 percent will be over age 65 by 2030), caring for patients who are in their final years of life will become more commonplace and will be guided by best practices.

Ariadne Labs
ariadnelabs.org



CARE DELIVERY

Optimizing talent and technology to improve outcomes



REVITALIZE THE MEDICAL MAKER

RESEARCH AND DEVELOPMENT

Breaking down academic silos to advance human health



EMPOWER PEOPLE

PEOPLE-POWERED STUDIES

As patient-generated research platforms mature, supported by the ubiquitous use of smart mobile phones to track and study health data, they will contribute to the R&D pipeline by launching people-driven health investigations, designing their own studies, and working directly with regulatory bodies to commercialize new therapies.



Apple Research Kit
images.dailytech.com

PLANETARY HEALTH

As natural systems are being degraded to an unprecedented extent, experts in environmental health, medicine, biodiversity, and ecology are seeking to clearly understand the effects on human health.

Economist Intelligence Unit's Planetary Health
rockefellerfoundation.org



INFORMED TREATMENT DECISION-MAKING

Facing an abundance of choices, people newly diagnosed with serious conditions such as cancer will seek accurate, highly personalized information about their prognosis and the clinical effectiveness of a proposed treatment.

PotentiaMED
potentiamed.com



PRECISION COMMUNICATION

Innovations in hospital discharge protocols will replace generic information delivered by photocopy with individualized care plans that rely on sensors and mobile technology to support patients in restoring and maintaining good health following a hospital stay.

Wellpepper
wellpepper.com



ENGAGEMENT

Informing through timely, useful channels



CREATE DATA COMMONS

LINKED KNOWLEDGE

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IGNITING CHANGE

INNOVATIVE CARE MODELS IN THE POST-ACA DECADE

BREAK FALSE BOUNDARIES



DEMENTIA-FRIENDLY COMMUNITIES

As the population ages and dementia becomes more widespread, advocacy groups will encourage communities to address the problems of isolation and marginalization faced by those with dementia along with their families and caregivers.

Dementia Friendly America
dfamerica.org



COMMUNITY HEALING

Because early adversity is known to harm the developing bodies and brains of children, exploratory initiatives are testing a diverse set of services that blend biomedical therapies with social interventions to help communities heal kids exposed to adverse experiences and toxic stress.

Center for Youth Wellness
centerforyouthwellness.org



PHILANTHROPIC AGENDA SETTING

Activating responses to urgent twenty-first-century health threats

OVERCOME CLINICAL AND SYSTEMS INERTIA



RE-DEFINE where care happens and who provides it

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MOVE UPSTREAM



PLAN AND BENEFITS DESIGN

Collecting, tracking, and using data effectively and responsibly

AirSage
airsage.com



ALGORITHMIC IDENTITIES

Predictive analytics tools will replace the blunt demographics tools used to segment populations and anticipate risk, expanding risk adjustment methodologies to factor in one's genetic makeup, health history, and behavioral practices.

UPSTREAM TESTING

Behavioral wellness programs will improve health by increasing people's access to tools and knowledge—including sequencing of whole exomes (the most functionally relevant part of a person's DNA)—and giving individuals incentives to change their behavior to decrease health risks the tests identify.



National Institute of Health Whole-Genome Sequencing Project
nhi.nih.gov



Heal
getheat.com

A-LA-CARTE OFFERINGS

A build-your-own model of health care products and services will take shape as people blend consumer health offerings, such as on-demand doctors, and at-home and crowdsourced diagnostic information to supplement or compensate for health plans requiring greater cost-sharing.

POPULATION HEALTH

Uncovering community health assets

Community Paramedic Program
communityparamedic.org



FIRST RESPONDERS AS PCPs

For the 75 million people living in rural areas of the United States whose health care needs far outnumber health care options, integrating emergency and primary health care will increase access to medical services.



Transitions Clinic
transitionsclinic.org



UCSF
ucsf.edu

HUMAN NETWORK INTELLIGENCE

Containing twenty-first-century infectious disease outbreaks will require a blend of modern tracking tools and human intelligence.

RESOURCE MATCHMAKING

The on-demand economy that enables matching an unfulfilled need with an underutilized resource will open the door for connecting people who have health challenges with previously unrecognized care resources.

Lift Hero
jbs.twimg.com



How to Use This Map

LINKED KNOWLEDGE

FIVE CATALYZING FORCES ignited by the ACA are enabling the rearrangement and realignment of the elements of care.



BLOCKCHAIN HEALTH
The blockchain protocol could help accelerate the transition from centralized storage systems to transparent, anonymous, external computation networks for storing digital health information.

TWENTY-FOUR CARE MODELS show how talent, resources, and expertise can be organized to improve health and economic outcomes. These models are organized into six target areas. Each is accompanied by a signal of change, happening today.



SIX LEADERSHIP STRATEGIES enable leaders to spread and champion these models both inside and outside of their organizations.

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ABOUT THE . . .

INSTITUTE FOR THE FUTURE

The Institute for the Future is an independent, nonprofit strategic research group with more than 45 years of forecasting experience. The core of our work is identifying emerging trends and discontinuities that will transform global society and the global marketplace. We provide our members with insights into business strategy, design process, innovation, and social dilemmas. Our research generates the foresight needed to create insights that lead to action. Our research spans a broad territory of deeply transformative trends, from health and health care to technology, the workplace, and human identity. The Institute for the Future is based in Palo Alto, California.

HEALTH FUTURES LAB

No single organization can solve the complex challenges facing the world today, particularly in the fields of health and health care. At IFTF, we bring together a wide variety of stakeholders—from health care to food and retail—to work toward more resilient responses for the complex challenges facing global health. For more than 30 years IFTF's health research has brought futures thinking to the world of health and health care by looking for unexpected connections across this variety of stakeholders. Our research explores the social, scientific, economic and technological forces affecting health and grounds them with a deep understanding of the lives of individuals and families. By sensing connections between large-scale change and individual lives, we help organizations develop strategic insights and long-range initiatives to transcend boundaries and create person-centered approaches to supporting health and well-being.