# Business Model Innovation in Healthcare

UP MSHI: HI 250 Business Models Health IT (Dr. Mike Muin)

# Concepts, Frameworks, and Applications

# 1. Foundational Concepts

## What is Business Model Innovation?

**Definition**: A fundamental change to how a healthcare organization creates, delivers, and captures value. Unlike product innovation (creating new solutions) or process innovation (improving efficiency), business model innovation transforms the underlying architecture of a business.

Business model innovation in healthcare is particularly significant because it can address systemic challenges that technology alone cannot solve. While new medical technologies might improve treatment options, business model innovations can transform accessibility, affordability, and delivery of care.

**Key Elements of a Business Model**:

- **Value Proposition**: The benefit offered to customers—what problem you solve or need you fulfill. In healthcare, this might include improved outcomes, better patient experience, enhanced access, or lower costs. Value propositions in healthcare must often address multiple stakeholders simultaneously (patients, providers, payers).
- **Target Market**: Who the organization serves. Healthcare markets can be segmented by condition, demographics, geography, or payment model. Innovative models often target underserved segments or create new market categories.

- **Value Delivery**: How the solution reaches customers. This includes channels (physical locations, digital platforms), delivery model (synchronous vs. asynchronous), and patient journey considerations. Innovations often change where, when, or how care is delivered.
- **Revenue Model**: How the organization makes money. Traditional healthcare uses fee-for-service, but innovations include subscription models, value-based payments, capitation, bundled payments, and direct contracting.
- **Cost Structure**: Key expenses and resource allocation. Innovative models often fundamentally reshape cost structures through task-shifting, automation, remote delivery, or prevention-focused interventions.
- **Key Activities**: Critical processes to deliver value. These might include clinical operations, technology development, care coordination, or patient engagement. Business model innovations often transform which activities an organization performs.
- **Key Resources**: Essential assets required. These include clinical expertise, technological capabilities, patient relationships, and intellectual property. Innovative models might leverage different resources than traditional healthcare.
- **Key Partnerships**: External relationships needed. Healthcare increasingly requires partnerships across the ecosystem, including technology vendors, community organizations, and complementary service providers.

# Why Business Model Innovation Matters in Healthcare

- **Complex Ecosystem**: Healthcare involves multiple interconnected stakeholders (patients, providers, payers, pharma, regulators, employers) with different and sometimes competing interests. Business model innovation must navigate this complexity to create sustainable value.
- **Legacy Systems**: Healthcare delivery and payment systems evolved over decades, often creating entrenched models resistant to change. Many processes were designed for paper-based workflows and fee-for-service economics, requiring fundamental redesign.
- **Regulatory Environment**: Healthcare's highly regulated nature creates both constraints and opportunities for innovation. Successful business model

innovation must navigate regulatory requirements while finding creative ways to operate within them.

- **Misaligned Incentives**: Traditional healthcare models often reward volume over value, with fragmented financial incentives across the care continuum. Innovative business models typically realign incentives across stakeholders to achieve better outcomes.
- **Technological Transformation**: Digital health, AI, genomics, and other advances are enabling new ways to deliver care that were previously impossible. These technologies create the foundation for business model transformation beyond what was historically feasible.
- **Unsustainable Economics**: Healthcare costs continue to rise faster than inflation in most countries, creating economic pressure for disruptive solutions. Business model innovation can address cost structures that technology alone cannot fix.
- **Changing Consumer Expectations**: Patients increasingly expect healthcare experiences that match consumer experiences in other industries, creating demand for more convenient, transparent, and personalized care models.

# 2. Key Innovation Frameworks for Healthcare

## The Disruptive Innovation Model (Clayton Christensen)

**Core Concept**: Disruptive innovation describes a process whereby a smaller company with fewer resources can successfully challenge established incumbent businesses by targeting overlooked segments with solutions that appear initially "inferior" by traditional measures but improve over time to meet mainstream market needs.

Christensen's research demonstrated that successful disruptors typically begin by targeting either:

1. **Non-consumers** - people who previously couldn't access a solution because of cost, complexity, or availability

2. **Overserved customers** - people receiving more functionality than they need or want to pay for

**Key Principles of Disruptive Innovation**:

- **Starts at the Bottom**: Disruptors typically begin with simpler, more affordable, and more accessible versions of existing products or services.
- **Improves Over Time**: While initially "inferior" on traditional performance metrics, disruptive solutions improve over time, eventually meeting the needs of mainstream customers.
- **Changes the Basis of Competition**: Disruption often occurs by changing what people value—emphasizing convenience, simplicity, or affordability over sophistication or comprehensiveness.
- **Incumbents Struggle to Respond**: Established organizations are typically optimized to serve their best customers with improved versions of their core offerings, making it difficult to respond to disruptive threats.
- **Creates New Value Networks**: Successful disruption often creates entire ecosystems of complementary products and services.

**Healthcare Applications**:

- **Retail Clinics** (MinuteClinic, Walmart Health): Simplified the delivery of basic primary care services using standardized protocols and lower-cost providers. Initially dismissed by traditional healthcare as limited, these models continue expanding their scope of services.
- **Telemedicine** (Teladoc, Amwell): Started by providing convenient but limited virtual care for simple conditions, now expanding to manage chronic diseases and specialty care. The COVID-19 pandemic accelerated this disruption.
- **Direct-to-Consumer Diagnostics** (23andMe, Everlywell): Made testing accessible without physician gatekeepers. Initially focused on wellness or ancestry information but expanding to provide clinically actionable insights.
- **Digital Therapeutics** (Livongo, Omada): Software-based interventions that began with simplified approaches to chronic condition management, now demonstrating clinical outcomes comparable to medication for some conditions.

- **High-Deductible Health Plans with HSAs**: Initially seen as inferior coverage, these consumer-directed models have grown to represent a significant portion of employer-sponsored insurance.

# Blue Ocean Strategy (Kim & Mauborgne)

**Core Concept**: Rather than competing in existing crowded marketplaces ("red oceans"), organizations can create uncontested market spaces ("blue oceans") where competition is irrelevant. This is achieved through "value innovation"—simultaneously pursuing differentiation and low cost.

**Key Elements**:

- **Eliminate/Reduce/Raise/Create Grid**: A systematic tool to reconfigure the offering:
    * **Eliminate**: Which factors can be completely removed?
    * **Reduce**: Which factors can be reduced well below industry standards?
    * **Raise**: Which factors should be raised well above industry standards?
    * **Create**: Which factors should be created that the industry has never offered?
- **Value Innovation**: Breaking the value-cost trade-off by offering unprecedented value while simultaneously keeping costs low. This contrasts with traditional competitive strategy that assumes a choice between differentiation and low cost.
- **Reconstructing Market Boundaries**: Challenging industry assumptions about what customers value and how services should be delivered. This involves looking across alternative industries, strategic groups, buyer chains, complementary offerings, and time.
- **Focus on Non-Customers**: Expanding the market by reaching people not currently served, rather than focusing solely on existing customer preferences.
- **Get the Strategic Sequence Right**: Following a systematic process of:
    * Buyer utility (creating exceptional value)
    * Price (ensuring accessibility)
    * Cost (ensuring profitability)
    * Adoption (addressing stakeholder concerns)

**Healthcare Applications**:

- **Concierge Medicine Models**: Created a new category by eliminating insurance billing complexity, reducing patient volume, raising access and time with physicians, and creating membership relationships.
- **Specialized Surgical Centers**: Facilities like the Shouldice Hernia Hospital focused exclusively on one procedure, eliminating complexity while raising quality and lowering costs.
- **Direct Primary Care**: Eliminated insurance for primary care, reduced documentation burden, raised time with patients, and created subscription-based financial relationships.
- **Virtual-First Health Plans**: Created insurance products designed primarily around virtual care, eliminating physical infrastructure for routine care while creating digital-first experiences.
- **Medical Tourism**: Created international healthcare markets by eliminating proximity requirements, reducing costs, maintaining high quality, and creating hospitality experiences around medical procedures.

# Jobs-to-be-Done Framework (Christensen)

**Core Concept**: People "hire" products and services to help them accomplish specific "jobs" in their lives. Understanding these jobs—the progress a person is trying to make in particular circumstances—provides deeper insight than traditional market segmentation.

**Key Elements**:

- **Functional, Emotional, and Social Dimensions**: Jobs have multiple dimensions:
    * **Functional**: The practical task to be accomplished
    * **Emotional**: How someone wants to feel (or avoid feeling)
    * **Social**: How someone wants to be perceived by others
- **Circumstances of the Job**: The specific situation matters as much as the job itself. When, where, and why someone is trying to make progress creates the context for understanding their needs.

- **Competing Solutions**: The real competition isn't just similar products but anything someone might "hire" to accomplish the job, which often crosses industry boundaries.
- **Hiring and Firing**: People "hire" solutions they believe will help them progress and "fire" those that fail to deliver, switching to alternatives that better meet their needs.

**Healthcare Applications**:

- **Patient Journey Mapping**: Identifying the emotional, functional, and social dimensions of seeking care helps organizations design more effective services. For example, a patient with diabetes isn't just trying to lower their blood glucose but also attempting to live normally without stigma.
- **Digital Health App Design**: Understanding the real "job" behind health tracking reveals why many wellness apps fail. People don't want data—they want progress toward feeling better, looking better, or living longer.
- **Care Model Redesign**: Patients "hire" urgent care not just for medical treatment but to resolve uncertainty quickly and conveniently. Redesigning primary care to address these jobs can reduce unnecessary urgent care and ED visits.
- **Consumer Health Product Development**: Patients often "hire" supplements not primarily for their clinical effects but for a sense of control over their health, explaining why evidence of ineffectiveness doesn't always affect purchasing behavior.
- **Telehealth Adoption**: Understanding that patients sometimes "hire" in-person visits for reassurance rather than medical necessity helps design virtual care services that address these emotional needs.

# Value Proposition Canvas (Osterwalder)

**Core Concept**: A structured approach to ensure your products and services precisely address what matters most to customers. The canvas visually maps how your offering creates value by relieving customer pains and creating customer gains.

**Key Elements**:

- **Customer Profile**: The right side of the canvas captures:

- **Customer Jobs**: What the customer is trying to accomplish
- **Customer Pains**: Negative outcomes, risks, and obstacles related to the jobs
- **Customer Gains**: Benefits and positive outcomes the customer desires
- **Value Map**: The left side of the canvas describes:
- **Products & Services**: What you offer customers
- **Pain Relievers**: How your offering alleviates specific customer pains
- **Gain Creators**: How your offering produces customer gains
- **Achieving Fit**: The goal is to design offerings where your value map matches the customer profile—where your products and services address important jobs, relieve significant pains, and create essential gains.
- **Prioritization**: Not all jobs, pains, and gains are equally important. The framework encourages focusing on what matters most to customers.

**Healthcare Applications**:

- **Patient-Centered Care Design**: Mapping the jobs, pains, and gains of patients with specific conditions helps create care models that address what actually matters to them, beyond just clinical outcomes.
- **Digital Health Solution Development**: Understanding the priorities of both patients and providers ensures new technologies address real needs rather than assumed ones.
- **Provider Service Offerings**: Hospitals and healthcare systems can use the canvas to design service lines that better meet community needs and create competitive advantage.
- **Healthcare App Value Proposition Design**: Mapping the canvas for both patients and providers helps create solutions that work within clinical workflows while meeting patient needs.
- **Insurance Product Design**: Health plans can use the canvas to create benefits packages that address member priorities beyond just coverage.

**Quick Student Assignment** :

- Write a short essay on this subject: Aside from telemedicine-related innovation, what changes in the healthcare industry impressed me the most, and why?

- No more than 140 words. Send to my UP email before 12 pm on March 11, 2025.

# 3. Business Model Innovation Patterns in Healthcare

## Vertical Integration

**Description**: Combining multiple stages of the healthcare value chain under one organization. This pattern involves owning and controlling different parts of the care delivery and financing system that traditionally operated independently.

Vertical integration can occur in various directions:

- **Forward integration**: Moving toward the patient (e.g., an insurer acquiring provider practices)
- **Backward integration**: Moving toward suppliers (e.g., a hospital acquiring a medical device company)
- **Balanced integration**: Expanding in multiple directions simultaneously

**Examples**:

- **Kaiser Permanente**: Pioneered the integrated delivery system combining insurance, hospitals, and physician groups. This model allows alignment of incentives across the care continuum and enables investment in prevention.
- **CVS-Aetna**: Combined pharmacy, retail clinics, and health insurance to create a more comprehensive health services company. This integration enables new care models at pharmacy locations and better coordination of pharmacy benefits with medical coverage.
- **Optum (UnitedHealth Group)**: Expanded from insurance into provider organizations, pharmacy benefits management, and data analytics. This allows them to influence care delivery directly while gathering data to optimize operations.

- **Intermountain Healthcare**: Developed its own insurance product (SelectHealth) to create a fully integrated delivery system with aligned financial incentives for value-based care.

**Benefits**:

- **Reduced Transaction Costs**: Eliminates contracting and negotiation between entities, streamlining operations and reducing administrative burden.
- **Aligned Incentives**: Creates financial alignment across the care continuum, enabling investment in prevention and care coordination.
- **Streamlined Patient Experience**: Offers patients a more coordinated journey without handoffs between disconnected organizations.
- **Data Integration**: Enables comprehensive data sharing across the care continuum, supporting better decision-making and care coordination.
- **Scale Economies**: Creates purchasing power and operational efficiencies through shared services and infrastructure.

**Challenges**:

- **Complexity**: Managing diverse business units with different expertise and cultures can be difficult.
- **Capital Requirements**: Acquiring or building new capabilities requires significant investment.
- **Regulatory Scrutiny**: Vertical integration may face antitrust concerns and regulatory hurdles.
- **Cultural Integration**: Different parts of the healthcare ecosystem have distinct cultures that can be difficult to harmonize.

# Platform Business Models

**Description**: Multi-sided platforms that connect different stakeholder groups, facilitating interactions and value exchange between them. Unlike traditional linear businesses that create value through products or services, platforms create value by enabling connections.

Platform models in healthcare typically connect combinations of patients, providers, payers, pharmaceutical companies, and other stakeholders. They often benefit from powerful network effects—as more participants join each side of the platform, the value increases for everyone.

**Examples**:

- **Zocdoc**: Connects patients seeking appointments with available providers, solving scheduling challenges for both sides while generating valuable market data.
- **GoodRx**: Connects consumers seeking affordable medications with pharmacies offering competitive pricing, while providing a marketing channel for pharmaceutical manufacturers.
- **American Well (Amwell)**: Connects patients seeking virtual care with available providers, while also connecting health systems and health plans to telehealth infrastructure.
- **Health Information Exchanges**: Connect various healthcare organizations to enable secure patient data sharing, improving coordination of care across otherwise disconnected entities.
- **Healthcare Marketplaces**: Connect patients directly to providers with transparent pricing, often focusing on elective or cash-based services (e.g., Sesame, Medibid).

**Benefits**:

- **Network Effects**: Value increases as more participants join, creating a competitive advantage that strengthens over time.
- **Reduced Search Costs**: Helps participants find each other more efficiently than traditional methods.
- **Improved Transparency**: Often brings greater visibility to pricing, quality, and availability of healthcare services.
- **Scalability**: Can grow rapidly without proportional increases in infrastructure or personnel costs.
- **Data Generation**: Creates valuable data about market dynamics, preferences, and trends.

**Challenges**:

- **Chicken-and-Egg Problem**: Difficult to attract one side of the market without already having the other side.
- **Regulatory Constraints**: Healthcare regulations may limit certain types of platforms or connections.
- **Trust and Quality Control**: Maintaining quality across a broad network of participants can be difficult.
- **Monetization Strategy**: Deciding which side(s) of the platform to charge and how much can be complex.

# "As-a-Service" Models

**Description**: Subscription or consumption-based access to healthcare services, products, and technologies. This model shifts from one-time transactions or capital expenditures to ongoing relationships with recurring revenue.

As-a-Service models transform traditional healthcare offerings by emphasizing access over ownership, outcomes over products, and ongoing relationships over episodic transactions. They often combine products, services, and software into integrated solutions.

**Examples**:

- **One Medical**: Membership-based primary care combining a monthly/annual fee with insurance billing for visits. The subscription covers enhanced access, digital communication, and a superior experience.
- **Philips**: Offers diagnostic equipment as a service, where hospitals pay based on usage rather than purchasing the equipment outright. This includes ongoing maintenance, updates, and operational support.
- **Cedar**: Provides patient financial experience as a service to healthcare providers, offering a technology platform and expertise for a subscription fee rather than selling software.
- **Collective Health**: Delivers a comprehensive benefits platform as a service to employers, combining technology, service operations, and expertise for a per-employee fee.

- **Omada Health**: Provides chronic condition management as a service, with subscription pricing that includes coaching, connected devices, and personalized interventions.

**Benefits**:

- **Predictable Revenue**: Creates recurring, predictable cash flow rather than lumpy, one-time transactions.
- **Ongoing Relationship**: Establishes continuing relationships that enable continuous improvement and expansion opportunities.
- **Focus on Outcomes**: Aligns provider and customer incentives around delivering sustained results rather than completing transactions.
- **Reduced Capital Requirements**: Allows customers to access capabilities without large upfront investments, increasing accessibility.
- **Continuous Improvement**: Creates incentives for the service provider to continuously enhance offerings to maintain subscriptions.

**Challenges**:

- **Revenue Recognition**: May delay revenue compared to traditional sales models.
- **Customer Acquisition Cost**: High acquisition costs must be recouped over longer customer relationships.
- **Operational Complexity**: Requires excellent service delivery and relationship management capabilities.
- **Pricing Strategy**: Determining the right pricing structure that balances value and accessibility.

# Value-Based Models

**Description**: Healthcare business models where payment is tied to outcomes rather than volume of services provided. These models fundamentally realign financial incentives to reward quality, efficiency, and patient outcomes rather than service quantity.

Value-based models represent a spectrum of approaches with varying levels of financial risk, from pay-for-performance bonuses to full capitation where providers assume complete financial responsibility for a population's healthcare needs.

**Examples**:

- **Iora Health** (now One Medical/Amazon): Pioneered team-based primary care with a full-risk capitation model for Medicare patients. Their model invests heavily in prevention, behavioral health integration, and addressing social determinants.
- **Oak Street Health**: Focuses exclusively on Medicare patients, particularly in underserved communities, taking full financial risk for their care. Their model includes purpose-built clinics, transportation assistance, and comprehensive care management.
- **CityBlock Health**: Provides integrated medical, behavioral, and social care for complex, high-need populations under value-based arrangements with health plans. Their model emphasizes community-based care and addressing social determinants.
- **Landmark Health**: Delivers home-based primary care to complex, chronically ill patients under risk-based contracts. Their model brings care to patients who struggle to access traditional office-based services.
- **Accountable Care Organizations (ACOs)**: Provider groups that share savings when they improve quality while reducing costs for attributed patient populations.

**Benefits**:

- **Aligned Incentives**: Creates financial incentives for prevention, care coordination, and appropriate utilization.
- **Focus on Prevention**: Encourages investment in preventive services that reduce downstream costs.
- **Improved Care Coordination**: Incentivizes communication and coordination across previously siloed care settings.
- **Long-term Cost Reduction**: Addresses the root causes of healthcare costs rather than shifting costs between stakeholders.

- **Patient-Centered Approach**: Encourages understanding and addressing patient needs comprehensively.

**Challenges**:

- **Risk Management**: Requires sophisticated actuarial and care management capabilities.
- **Data Requirements**: Demands robust data and analytics to manage population health effectively.
- **Cultural Transformation**: Necessitates significant changes in provider culture and practice patterns.
- **Initial Investment**: Often requires upfront investment in infrastructure and capabilities before savings materialize.

# 4. Case Studies in Healthcare Business Model Innovation

## Case Study 1: Telemedicine Transformation

**Company:** Teladoc Health

**Background**:

Teladoc was founded in 2002 to provide on-demand remote medical care, initially focusing on simple urgent care needs. The company has evolved from a transactional telemedicine provider to a comprehensive virtual healthcare company through organic growth and strategic acquisitions, including the $18.5 billion merger with Livongo in 2020.

**Business Model Innovation:**

- **Shifted from Episodic to Longitudinal Care**: Evolved from treating isolated acute conditions to managing ongoing chronic care relationships, particularly through the Livongo acquisition.

- **Changed Reimbursement Model**: Transitioned from purely fee-for-service to include subscription models for both B2B (employers, health plans) and B2C channels, creating more predictable revenue.
- **Leveraged Provider Networks Efficiently**: Developed technology to match patient demand with available clinicians across time zones, optimizing provider utilization and enabling 24/7 coverage without traditional staffing models.
- **Created Multi-Sided Platform**: Built a platform connecting patients, providers, employers, and health plans with virtual care capabilities, benefiting from network effects as the platform grows.
- **Data-Driven Personalization**: Integrated device data, clinical information, and behavioral insights to personalize interventions and improve outcomes, particularly for chronic conditions.

**Impact:**

- **Expanded Access**: Reached populations with limited access to care, including rural communities, the homebound, and those with transportation barriers.
- **Reduced Costs**: Delivered care at 20-30% lower costs compared to traditional care models for similar conditions through more efficient staffing models and reduced overhead.
- **Improved Convenience**: Reduced wait times from days or weeks to minutes or hours for many conditions, with 24/7 availability.
- **Changed Expectations**: Fundamentally shifted patient and provider expectations about when, where, and how care can be delivered.
- **Regulatory Change**: Helped drive permanent regulatory changes supporting telehealth during and after the COVID-19 pandemic.

**Lessons Learned**:

- **Technology Alone Isn't Enough**: Success required rethinking care delivery models, not just adding video capabilities to existing practices.
- **Clinical Quality Focus**: Maintaining clinical quality and safety was essential for acceptance by healthcare systems and regulators.
- **Hybrid Integration**: Complementing rather than completely replacing in-person care proved more successful than approaches positioning telemedicine as a complete alternative.

# Case Study 2: Retail Healthcare

**Company:** CVS MinuteClinic

**Background**:

MinuteClinic began in 2000 as QuickMedx, offering a limited menu of services for common ailments. CVS acquired the company in 2006 and expanded it to become the largest retail clinic operator in the United States. The acquisition of Aetna in 2018 further expanded CVS's healthcare strategy.

**Business Model Innovation:**

- **Simplified Delivery Model**: Created a standardized approach for common conditions using evidence-based protocols that could be consistently delivered by nurse practitioners and physician assistants.
- **Transparent, Fixed Pricing**: Established clear, upfront pricing for services, contrasting with the often opaque pricing in traditional healthcare.
- **Task-Shifting from Physicians**: Utilized nurse practitioners and physician assistants as primary care providers, reducing costs while maintaining quality for appropriate conditions.
- **Integration with Retail Pharmacy**: Located clinics within pharmacies, creating convenience for patients and synergies between prescription fulfillment and healthcare services.
- **Extended Access Hours**: Offered evening and weekend availability, addressing a major gap in traditional primary care accessibility.

**Impact:**

- **Scale**: Grew to over 1,100 clinics nationwide, demonstrating the viability of retail healthcare at scale.
- **Patient Satisfaction**: Achieved 95% patient satisfaction ratings through convenience, transparency, and service quality.
- **Market Influence**: Forced traditional providers to improve convenience factors including extended hours, same-day appointments, and simplified experiences.

- **Care Coordination**: Evolved from standalone clinics to components of an integrated healthcare delivery strategy, particularly following the Aetna acquisition.
- **Preventive Services**: Expanded from acute care to include preventive services, vaccinations, and chronic condition monitoring.

**Lessons Learned**:

- **Scope Limitations**: Recognizing appropriate boundaries of the model and developing clear referral processes for more complex cases was essential.
- **Resistance Management**: Navigating initial resistance from physician groups required demonstrating quality outcomes and positioning as complementary rather than competitive to traditional primary care.
- **Incremental Expansion**: Successfully expanded scope incrementally as the model proved effective and gained acceptance.
- **Healthcare Experience Design**: Creating a retail-like customer experience while maintaining clinical quality required rethinking traditional healthcare delivery assumptions.

# Case Study 3: Digital Therapeutics

**Company:** Livongo (now part of Teladoc)

**Background**:

Founded in 2014, Livongo explored the digital therapeutics category with its diabetes management solution. The company later expanded to other chronic conditions before being acquired by Teladoc in 2020 for $18.5 billion, the largest digital health acquisition to date.

**Business Model Innovation:**

- **Subscription-Based Chronic Condition Management**: Created a recurring revenue model where employers and health plans pay a monthly fee per enrolled member, regardless of utilization.

- **Value-Based Pricing Tied to Outcomes**: Designed pricing models directly linked to demonstrated clinical and financial outcomes, including money-back guarantees for clients not achieving promised savings.
- **Direct Contracting with Self-Insured Employers**: Bypassed traditional healthcare channels by selling directly to employers, accelerating adoption and reducing sales complexity.
- **Integration of Devices, Coaching, and Analytics**: Combined connected devices, human coaching, and AI-driven insights into a comprehensive solution rather than selling components separately.
- **"Silence is Good" Philosophy**: Designed the system to intervene only when necessary, contrasting with engagement-focused digital health approaches that often lead to alert fatigue.

**Impact:**

- **Financial Results**: Demonstrated $1,908 average annual cost savings per diabetic member through reduced medical utilization and improved medication adherence.
- **Clinical Outcomes**: Achieved measurable improvement in clinical markers, including HbA1c reduction averaging 0.8 points for members with poorly controlled diabetes.
- **Engagement**: Engaged 83% of members in actively managing their condition, far exceeding typical rates for chronic condition management programs.
- **Category Creation**: Established digital health management as a distinct category, paving the way for numerous competitors and accelerating innovation in the space.
- **Market Validation**: The significant acquisition price validated the economic model and set new valuation benchmarks for digital health companies.

**Lessons Learned**:

- **Human + Technology Balance**: Success required finding the right balance between automated technology and human coaching, not eliminating the human element.

- **Evidence Generation**: Building a robust evidence base demonstrating both clinical and economic outcomes was essential for market acceptance and growth.
- **Enterprise Go-to-Market Strategy**: Focusing on employers and health plans rather than individual consumers enabled faster scale and more sustainable economics.
- **Behavioral Science Foundation**: Grounding the solution in behavioral science principles rather than simply applying technology to healthcare proved crucial for engagement and outcomes.

# Case Study 4: Value-Based Primary Care

**Company:** Oak Street Health

**Background**:

Founded in 2012, Oak Street Health developed a primary care model specifically for Medicare patients, particularly those in underserved communities. The company went public in 2020 and was acquired by CVS Health in 2023 for approximately $10.6 billion.

**Business Model Innovation:**

- **Full-Risk Capitation Model**: Takes full financial responsibility for Medicare patients' total cost of care, receiving fixed monthly payments instead of fee-for-service reimbursement.
- **Focus on High-Need Populations**: Specifically targets older adults with complex needs in underserved communities, a population often avoided by traditional providers due to complexity and cost.
- **Technology-Enabled Care Management**: Developed proprietary technology platform (Canopy) to identify high-risk patients, coordinate care, and manage population health.
- **Purpose-Built Clinics in Underserved Areas**: Designs and builds clinics specifically for the needs of older adults in locations traditionally underserved by healthcare providers.
- **Transportation Solution**: Provides free transportation to appointments, addressing a critical social determinant of health and barrier to care for many seniors.

- **Team-Based Care Model**: Employs multidisciplinary teams including physicians, nurse practitioners, medical assistants, and behavioral health specialists, with each provider seeing fewer patients than in traditional models.

**Impact:**

- **Clinical Outcomes**: Achieved 51% reduction in hospital admissions, 42% reduction in 30-day readmission rates, and 51% reduction in emergency department visits compared to Medicare benchmarks.
- **Quality Ratings**: Consistently earned 5-star quality ratings from the Centers for Medicare & Medicaid Services.
- **Growth**: Expanded to over 170 centers across 21 states, demonstrating scalability of the model.
- **Economic Sustainability**: Generated sustainable economics by reducing total cost of care through prevention and appropriate utilization, despite higher upfront investment in comprehensive primary care.
- **Community Impact**: Created healthcare access in previously underserved communities, often becoming anchor institutions in these neighborhoods.

**Lessons Learned**:

- **Risk Management Capabilities**: Success in value-based care requires sophisticated risk adjustment, utilization management, and analytics capabilities beyond traditional primary care.
- **Redesigned Operating Model**: Fundamentally different economics required completely reimagining the care delivery model, not just incremental changes to traditional primary care.
- **Investment Timeline**: The model requires significant upfront investment before generating returns, necessitating patient capital and a long-term perspective.
- **Social Determinants Focus**: Addressing non-medical factors affecting health outcomes proved essential for managing total cost of care effectively.

# Case Study 5: Hospital at Home

**Company:** Medically Home

**Background**:

Founded in 2016, Medically Home pioneered a model to deliver hospital-level care in patients' homes. The company has received strategic investments from Mayo Clinic and Kaiser Permanente and expanded significantly during the COVID-19 pandemic.

**Business Model Innovation:**

- **Acute Care Delivered in Patient Homes**: Created a regulatory-compliant model to provide hospital-level care in residential settings, including remote monitoring, in-person visits, and virtual consultations.
- **Virtual Command Center**: Established 24/7 medical command centers staffed by physicians and nurses who remotely monitor patients and coordinate care delivery.
- **Rapid-Response Logistics Network**: Developed a supply chain and logistics operation capable of delivering medications, equipment, and dispatch clinicians to patients' homes within hours.
- **Novel Payment Models**: Worked with Medicare and private insurers to develop reimbursement approaches for "hospital without walls," including the CMS Acute Hospital Care at Home waiver program.
- **Technology-Enabled Distributed Care**: Created a technology platform that enables coordination among distributed care team members, including physicians, nurses, paramedics, and other providers.

**Impact:**

- **Cost Reduction**: Demonstrated 16-30% cost reduction compared to traditional hospitalization for eligible conditions, primarily through elimination of facility overhead costs.
- **Patient Experience**: Achieved significantly higher patient satisfaction scores compared to inpatient care, with patients reporting better sleep, nutrition, and overall experience.
- **Clinical Outcomes**: Matched or exceeded traditional hospital outcomes for appropriate conditions, with reduced hospital-acquired conditions due to the home environment.

- **Hospital Capacity**: Effectively increased hospital capacity without construction during COVID-19 surges and beyond, allowing inpatient beds to be prioritized for the most critically ill patients.
- **Care Model Innovation**: Challenged fundamental assumptions about which conditions require facility-based care, expanding the range of services that can be safely delivered at home.

**Lessons Learned**:

- **Patient Selection Criteria**: Developing clear and appropriate eligibility criteria proved essential for clinical safety and economic viability.
- **Ecosystem Development**: Success required building an entire ecosystem of services beyond clinical care, including logistics, technology, and support services.
- **Regulatory Navigation**: Working proactively with regulators to develop appropriate frameworks was necessary, as existing regulations didn't contemplate this care model.
- **Health System Integration**: Integrating with existing health system workflows and EHRs presented significant challenges requiring creative technical and operational solutions.

# 5. Barriers to Business Model Innovation in Healthcare

Healthcare faces unique challenges that can impede business model innovation. Understanding these barriers is essential for developing effective strategies to overcome them.

## Regulatory Barriers

- **Complex Compliance Requirements**: Healthcare is governed by numerous regulations including HIPAA, FDA regulations, state licensing laws, and anti-kickback statutes (for US settings). In the Philippines, we have regulations coming

from DOH, PhilHealth, FDA, NPC and others. These create boundaries within which innovation must operate and often limit business model flexibility.

*Example*: Telemedicine companies must navigate state-by-state licensing requirements, limiting their ability to deploy national provider networks efficiently.

- **Reimbursement Limitations**: Many innovative services lack established billing codes or face payment restrictions that make them economically unviable under traditional reimbursement models.

*Example*: Digital health apps often struggle with reimbursement because they don't fit neatly into existing payment categories, forcing them to pursue direct-to-consumer or employer-paid models initially.

- **State-Specific Licensing Requirements** (for US setting): Healthcare professionals typically need separate licenses for each state where they practice, creating significant barriers to telehealth models that could otherwise scale nationally.

*Example*: A telehealth provider must ensure each clinician has appropriate licenses in every state where patients are located, creating operational complexity and limiting workforce flexibility.

- **Certification and Accreditation Constraints**: Healthcare facilities and systems must meet numerous certification requirements that often presume traditional care delivery models.

*Example*: Ambulatory surgery centers face strict physical facility requirements that may not be relevant to newer, minimally invasive procedures but still drive up costs.

# Cultural and Organizational Barriers

- **Provider Resistance to Change**: Healthcare professionals often have established practice patterns and may resist innovations that require significant workflow changes or threaten their autonomy.

*Example*: EHR implementations frequently face clinician resistance due to perceived interference with established workflows and patient interactions.

- **Traditional Hierarchies and Silos**: Healthcare organizations typically operate in functional silos with clear hierarchies that can impede cross-disciplinary collaboration and innovation.

*Example*: Hospital departments often operate as separate units with their own budgets and leadership, making it difficult to implement innovations that require coordination across departments.

- **Misaligned Incentives Across Stakeholders**: Different healthcare stakeholders (providers, payers, patients, suppliers) often have conflicting financial incentives that can block innovation that benefits the system as a whole.

*Example*: A hospital investing in reducing readmissions may see decreased revenue under fee-for-service payment models, even though the innovation benefits patients and reduces overall healthcare costs.

- **Risk Aversion in Healthcare Decision-Making**: The "do no harm" principle in healthcare can promote excessive caution and reluctance to adopt new approaches, even when existing practices have known limitations.

*Example*: New care delivery models often face demands for extensive evidence before adoption, creating a catch-22 where evidence can't be generated without implementation.

# Technical Barriers

- **Legacy EHR and IT Infrastructure**: Most healthcare organizations operate with EHR systems designed for fee-for-service billing and clinical documentation, not innovation or value-based care.

*Example*: Adding telehealth capabilities to existing EHR workflows often requires complex workarounds because the systems weren't designed with virtual care in mind.

- **Interoperability Challenges**: Healthcare data remains fragmented across different systems and organizations, limiting the ability to coordinate care or analyze outcomes across the care continuum.

*Example*: A primary care innovation may struggle to track its impact on hospital utilization if it cannot access reliable data from local hospitals.

- **Data Integration Complexity**: Combining clinical, financial, operational, and patient-generated data presents technical challenges that impede comprehensive analysis and innovation.

*Example*: A population health management program may have difficulty integrating social determinants data with clinical data due to different data formats and sources.

- **Implementation and Workflow Challenges**: Healthcare workflows have evolved over decades and are deeply ingrained, making changes difficult to implement without disruption to care delivery.

*Example*: Implementing a new care model often requires significant workflow redesign, training, and change management support beyond just deploying new technology.

# Market and Ecosystem Barriers

- **Network Effects Requiring Critical Mass**: Many healthcare innovations require widespread adoption to deliver value, creating chicken-and-egg problems for early-stage innovations.

*Example*: Health information exchanges require participation from most local healthcare providers to be valuable, but individual providers may hesitate to join until others have done so.

- **Multiple Stakeholders with Competing Interests**: Healthcare decisions typically involve multiple stakeholders—patients, providers, payers, employers, regulators—each with different priorities and incentives.

*Example*: An employer-focused wellbeing program may struggle to gain physician support if it's perceived as bypassing or competing with traditional medical care.

- **Long Sales Cycles Affecting Investment Returns**: Healthcare typically has extremely long sales and implementation cycles, stretching investor timelines and increasing capital requirements.

*Example*: Selling to hospital systems often takes 12-18 months from initial contact to contract, with another 6-12 months for implementation—a timeline challenging for startups with limited runway.

- **Patient/Consumer Readiness for New Models**: Consumers have established expectations about healthcare delivery and may resist unfamiliar approaches, even if objectively better.

*Example*: Patients accustomed to in-person specialist care may initially resist consultations delivered via telehealth, even when equally effective.

# 6. Framework for Analyzing Business Model Innovation Potential

Evaluating healthcare business model innovations requires a structured approach that accounts for the unique characteristics of healthcare markets. This framework provides a comprehensive methodology for assessing new healthcare business models.

## 1. Value Proposition Assessment

### Core Questions

- **What job is the patient/customer trying to accomplish?**
  Identify the fundamental need the customer is trying to address—both functional and emotional aspects. For example, a diabetes patient isn't just trying to lower blood glucose but may also be seeking to reduce daily management burden and anxiety.

- **What pain points exist in the current approach?**
  Document specific frustrations, inefficiencies, costs, and risks in existing solutions. For healthcare providers, this might include administrative burden, while for patients it could include wait times or out-of-pocket costs.
- **How does the innovation create measurable value?**
  Articulate how the innovation addresses pain points and helps accomplish jobs better than existing approaches. Value should be quantifiable when possible (e.g., time saved, costs reduced, outcomes improved).
- **Who captures the created value?**
  Map how economic and non-economic value is distributed among stakeholders (patients, providers, payers, etc.). Sustainable innovations typically create value for multiple stakeholders.

### Evaluation Criteria

- **Value Magnitude**: How significant is the improvement over current solutions? Incremental improvements often face adoption challenges without other advantages. Transformative value can overcome significant adoption barriers.
- **Value Evidence**: What proof exists that the innovation delivers value? Healthcare requires evidence—whether clinical trials, pilot results, or validated models. The strength and relevance of evidence significantly affects adoption potential.
- **Value Alignment**: Does the value align with stakeholder priorities? Value that directly addresses strategic priorities for key decision-makers has higher adoption potential than benefits perceived as peripheral.
- **Value Distribution**: How is value shared among stakeholders? Innovations that concentrate benefits for one stakeholder while imposing costs or risks on others face greater resistance than those distributing value more equitably.

## 2. Market Opportunity Analysis

### Core Questions

- **What market segment is being targeted?**
  Define the specific customer segment—by condition, demographics, care setting,

or other relevant factors. Precision in defining the target market is essential for effective positioning.

- **Is this an underserved segment or non-consumption scenario?**
  Determine whether the innovation addresses a gap in existing services or targets people not currently served by alternatives. Innovations targeting non-consumption often face less direct competition.
- **What is the size and growth trajectory of this opportunity?**
  Quantify the market in terms of potential customers and revenue, including growth projections. Healthcare innovations often target specific conditions or populations that may represent small segments of the overall healthcare market.
- **How will the market respond to the innovation?**
  Predict likely reactions from customers, competitors, and other stakeholders. In healthcare, this includes considering potential resistance from established players and regulatory responses.

## Evaluation Criteria

- **Market Size Calculations**:
- **Total Addressable Market (TAM)**: The total market demand for a product or service
- **Serviceable Available Market (SAM)**: The portion of TAM targeted by your products/services within your geographical reach
- **Serviceable Obtainable Market (SOM)**: The portion of SAM that you can realistically capture
- **Competition Analysis**: Assess direct competitors offering similar solutions and indirect competitors addressing the same needs differently. In healthcare, competition may include non-consumption (people doing nothing) or self-management approaches.
- **Market Readiness**: Evaluate evidence of market pull for the solution—including current workarounds, willingness to pay, and stakeholder awareness of the problem. Healthcare often requires evidence of both clinical need and organizational readiness to adopt new approaches.
- **Regulatory Fit**: Assess alignment with current regulatory environment and potential regulatory changes. Healthcare innovations that work within existing

regulatory frameworks generally face fewer adoption barriers than those requiring regulatory change.

# 3. Business Model Component Analysis

## Revenue Model Assessment

- **How will the innovation generate revenue?**
  Specify the mechanism for monetization—including fee-for-service, subscription, value-based contracts, licensing, or other approaches. Healthcare innovations often combine multiple revenue streams.
- **Is the pricing model aligned with value creation?**
  Determine whether pricing reflects where and how value is created. Value-based pricing is increasingly important in healthcare but requires robust outcomes measurement.
- **How sustainable is the revenue model?**
  Evaluate whether the revenue approach will remain viable as the market evolves and competitors respond. Healthcare reimbursement models continue to shift from volume to value, affecting long-term sustainability.
- **What are the revenue scaling possibilities?**
  Assess how revenue can grow through expanded market reach, additional services, or premium offerings. Healthcare innovations often start with limited scope and expand over time.

## Cost Structure Analysis

- **What are the major cost components?**
  Identify the primary drivers of cost—including personnel, technology, real estate, regulatory compliance, and customer acquisition. Healthcare often involves high customer acquisition costs due to complex decision-making processes.
- **How does the cost structure compare to traditional models?**
  Compare costs to existing approaches, identifying areas of advantage or disadvantage. Innovative models may have higher upfront costs but lower ongoing delivery costs.

- **What economies of scale are possible?**
  Determine how costs will change as the business grows. Technology-enabled healthcare models often have significant fixed costs but lower marginal costs, enabling strong scale economies.
- **Are there network effects that improve the cost position?**
  Assess whether increasing adoption improves the economics through network effects or data advantages. Health information platforms, for example, become more valuable and cost-effective as more users join.

### Resource Requirements

- **What key resources are needed?**
  Specify the critical assets required—including personnel, technology, intellectual property, data, and relationships. Healthcare innovations often require specialized clinical expertise alongside technical capabilities.
- **How difficult are these resources to acquire?**
  Assess the availability and cost of essential resources. Clinical talent, for example, may be scarce in certain specialties or resistant to new care models.
- **What partnerships are required?**
  Identify necessary relationships with other organizations to deliver the solution. Healthcare innovations frequently require partnerships across the ecosystem.
- **What capabilities need to be developed?**
  Determine what new skills or processes the organization must build. Healthcare business model innovations often require developing capabilities in areas like value-based contracting or remote care delivery.

## 4. Disruption Potential Assessment

### Christensen's Criteria

- **Does it target non-consumption or overserved customers?**
  Evaluate whether the innovation addresses needs of people not currently served or provides a "good enough" solution for those overserved by existing options.

Non-consumption opportunities in healthcare include people avoiding care due to cost, access barriers, or complexity.

- **Does it start with simplified solution that can evolve?**
  Assess whether the innovation begins with a focused solution addressing core needs before expanding. Successful healthcare disruptions typically start with limited scope (e.g., retail clinics treating simple conditions) before broadening.
- **Does it have a business model advantage over incumbents?**
  Determine whether the innovation's economics provide advantages incumbents would struggle to match. For example, telehealth can leverage provider time more efficiently across geographies.
- **Will incumbents be motivated to flee upmarket?**
  Predict whether established players will cede the initial market to the disruptor by focusing on more profitable segments. In healthcare, academic medical centers often focus on complex cases, creating space for disruptors to address routine care.

## Healthcare-Specific Disruption Indicators

- **Does it change who provides care?**
  Assess whether the innovation shifts care delivery to different types of professionals. Task-shifting from physicians to nurses or from professionals to patients/technology has been a common pattern in healthcare disruption.
- **Does it change where care is delivered?**
  Evaluate whether the innovation moves care to more accessible or lower-cost settings. The shift from hospitals to ambulatory settings, retail locations, and homes represents an ongoing disruption pattern.
- **Does it change when care is delivered?**
  Determine whether the innovation alters the timing of care from reactive to proactive or from scheduled to on-demand. Innovations that allow earlier intervention or more convenient timing often create significant value.
- **Does it change how care is paid for?**
  Assess whether the innovation introduces new payment models that align incentives differently. Changes from fee-for-service to value-based payment enable different care delivery approaches.

# 5. Implementation Viability

## Organizational Readiness

- **Cultural alignment with innovation**:
  Evaluate whether the organization's values and norms support the proposed changes. Healthcare organizations often have strong cultures that can either facilitate or block innovation adoption.
- **Leadership support**:
  Assess the level of commitment from key leaders and their willingness to address resistance. Healthcare innovations frequently require clinical champion leadership alongside executive sponsorship.
- **Resource availability**:
  Determine whether sufficient financial, human, and technical resources are available. Healthcare innovations often require significant investment before generating returns.
- **Change management capabilities**:
  Evaluate the organization's ability to implement change effectively. Healthcare has historically struggled with change management, requiring more extensive support than many other industries.

## Regulatory Navigation

- **Compliance requirements**:
  Identify relevant regulations and standards the innovation must satisfy. Healthcare innovations must navigate complex and sometimes contradictory regulations at federal, state, and local levels.
- **Reimbursement pathways**:
  Determine how the innovation will be paid for within existing reimbursement systems or what changes are required. Many healthcare innovations fail due to lack of clear reimbursement pathways.
- **Certification needs**:
  Assess what certifications or approvals the innovation requires. Healthcare solutions may need FDA clearance, HIPAA compliance certification, or other formal approvals.

- **Data privacy considerations**:
  Evaluate implications for protected health information and other sensitive data. Healthcare innovations involving data face particularly strict privacy requirements.

### Technical Feasibility

- **Integration requirements**:
  Determine how the innovation must connect with existing systems and workflows. Healthcare innovations typically need to integrate with EHRs and other legacy systems to be viable.
- **Workflow impacts**:
  Assess how current processes will change and what adaptation will be required. Healthcare workflows are often complex and deeply ingrained, making changes challenging to implement.
- **Training needs**:
  Identify what skills development will be needed for successful implementation. Healthcare innovations typically require significant training for both clinical and administrative staff.
- **Scalability considerations**:
  Evaluate whether the innovation can grow without proportional increases in resources or complexity. Healthcare solutions must scale across diverse settings with varying capabilities.

# 7. Strategies for Successful Business Model Innovation

## Start Small, Then Scale

- **Begin with focused pilots targeting specific populations**:
  Test the model with a well-defined patient group before expanding. This approach allows refinement of the model and generation of evidence without requiring systemic change initially.

*Example*: Oak Street Health began with a single clinic in Chicago's Edgewater neighborhood before expanding to multiple states.

- **Generate evidence of value before expanding**:
  Collect robust data demonstrating clinical, operational, and financial outcomes. Healthcare decision-makers typically require evidence before adopting new approaches.

*Example*: Omada Health conducted multiple clinical studies showing the effectiveness of its digital diabetes prevention program before scaling nationally.

- **Build credibility through measurable outcomes**:
  Focus on metrics that matter to key stakeholders and rigorously track performance. Different stakeholders value different outcomes—from clinical measures to patient satisfaction to financial results.

*Example*: Landmark Health demonstrates reduced hospital admissions and total cost of care for health plans considering their home-based care model.

- **Use early adopters as advocates**:
  Leverage successful implementation sites as reference cases for expansion. Peer influence is particularly powerful in healthcare adoption decisions.

*Example*: One Medical used employer clients like Google as references to accelerate adoption among other technology companies.

# Design for Multiple Stakeholder Value

- **Map value creation for all key stakeholders**:
  Explicitly identify how the innovation creates value for each stakeholder group—including patients, providers, payers, and others. Healthcare innovations that benefit only one stakeholder while disadvantaging others rarely succeed at scale.

*Example*: Teladoc's model creates value for patients (convenience), employers (reduced absenteeism), providers (flexible work), and payers (lower costs).

- **Ensure each stakeholder has clear incentives**:
  Design the business model so all necessary participants have reasons to engage. Consider both financial and non-financial motivations.

*Example*: GoodRx provides value to consumers (lower prices), pharmacies (customer acquisition), and pharmaceutical manufacturers (volume).

- **Address potential value conflicts early**:
  Identify where stakeholder interests may clash and design approaches to mitigate conflicts. In healthcare, financial incentives often create tension between stakeholders.

*Example*: Risk-sharing arrangements between providers and payers can align otherwise conflicting financial incentives around cost and quality.

- **Create win-win scenarios across the ecosystem**:
  Structure partnerships and financial arrangements to ensure mutual benefit. Sustainable healthcare innovations distribute value across the ecosystem rather than simply extracting it.

*Example*: Epic's App Orchard creates mutual value for the EHR vendor, third-party developers, healthcare organizations, and ultimately patients.

# Leverage Technology Appropriately

- **Use technology as an enabler, not the solution itself**:
  Focus on the problem to be solved rather than the technology. Many healthcare technology implementations fail because they prioritize technical capabilities over addressing real needs.

*Example*: Successful telehealth implementations emphasize clinical model design and workflow integration rather than just video technology.

- **Focus on solving workflow problems, not just adding features**:
  Understand how work actually happens and design solutions that improve rather

than complicate processes. Healthcare professionals already face significant administrative burden.

*Example*: Lark Health designed its chronic condition management solution to minimize disruption to patient daily routines rather than demanding extensive engagement.

- **Consider implementation and change management needs**:
  Plan for the human side of technology adoption from the beginning. Healthcare innovations often fail due to implementation challenges rather than technical limitations.

*Example*: CityBlock Health invests heavily in training community health workers and care teams rather than relying solely on its technology platform.

- **Ensure technical and business model alignment**:
  Design technology architecture that supports the business model rather than constraining it. Technical decisions should enable rather than dictate business strategy.

*Example*: Livongo designed its blood glucose meter with cellular connectivity to eliminate the need for manual data entry, supporting its "silence is good" philosophy.

# Navigate Regulatory Pathways Strategically

- **Engage with regulators early in the process**:
  Establish communication channels with relevant regulatory bodies before problems arise. Healthcare regulators are increasingly open to supporting innovation through collaboration.

*Example*: Heartflow engaged with the FDA early in its development process, helping shape appropriate evaluation protocols for its coronary CT analysis software.

- **Design within existing regulatory frameworks when possible**:
  Structure innovations to work within established rules rather than requiring regulatory changes. Innovations that require regulatory change face much longer implementation timelines.

*Example*: Many digital health companies initially pursued wellness claims rather than medical claims to avoid FDA regulation while establishing market presence.

- **Pursue regulatory innovation pathways when available**:
  Leverage programs designed to accelerate approval of innovative solutions. Many regulatory bodies have created innovation pathways specifically to support new approaches.

*Example*: Pear Therapeutics utilized the FDA's Digital Health Software Precertification Program to streamline the approval process for its prescription digital therapeutics.

- **Build evidence to support policy change**:
  Generate data that can inform regulatory evolution when existing frameworks are inadequate. Healthcare policy often evolves in response to demonstrated innovation value.

*Example*: Telehealth companies collectively generated evidence during the COVID-19 pandemic that supported permanent regulatory changes to telehealth reimbursement.

# Build Coalitions for Change

- **Identify and engage key influencers**:
  Recruit respected voices who can advocate for the innovation. In healthcare, clinical leaders and early adopters hold particular influence.

*Example*: Butterfly Network engaged prominent physicians as champions for its handheld ultrasound device, accelerating clinical adoption.

- **Create partnerships with established players**:
  Collaborate with incumbent organizations that bring credibility and distribution channels. These relationships can accelerate adoption and reduce market resistance.

*Example*: Omada Health partnered with large health plans and PBMs to reach millions of covered lives quickly.

- **Leverage patient advocacy organizations**:
  Engage with groups representing patient interests to build grassroots support. Patient demand can be a powerful force for healthcare innovation adoption.

*Example*: Continuous glucose monitoring companies worked with diabetes patient organizations to advocate for expanded insurance coverage.

- **Develop evidence-based case for change**:
  Build compelling narratives supported by data that demonstrate the need for innovation. Healthcare decision-makers respond to evidence of problems as well as evidence of solutions.

*Example*: Transcarent highlights employer healthcare cost increases and employee dissatisfaction to build the case for its alternative benefits approach.

# 8. Key Takeaways

1. **Business model innovation often has more impact than technology innovation alone**
   The same technology with different business models can yield dramatically different results. Many healthcare technologies fail not because the technology doesn't work, but because the business model doesn't align with market realities.

*Example*: Early patient portals using web technology failed to gain traction under fee-for-service models, while the same basic technology flourished under value-based care arrangements that rewarded patient engagement.

2. **Successful healthcare innovations balance multiple stakeholder needs**
   Healthcare has unusually complex stakeholder dynamics, requiring innovations to create value for patients, providers, payers, and often regulators simultaneously.

*Example*: Successful telehealth models create value for patients (convenience), providers (efficiency), health systems (capacity management), and payers (appropriate utilization).

3. **Many disruptive innovations start by targeting underserved segments**
   Rather than competing head-on with incumbents, successful healthcare disruptors often begin by serving populations or needs that existing systems serve poorly or not at all.

*Example*: Direct primary care initially focused on self-employed individuals and small businesses without access to comprehensive insurance before expanding to serve larger employer markets.

4. **Value-based care requires fundamentally different business models**
   Organizations cannot simply layer value-based care approaches onto fee-for-service operations and infrastructure. Success requires comprehensive redesign of care delivery, financial systems, and organizational structure.

*Example*: ChenMed built purpose-designed clinics, technology infrastructure, and staffing models specifically for its full-risk Medicare Advantage model rather than attempting to retrofit traditional practices.

5. **Digital transformation enables new business models but isn't sufficient alone**
   Technology provides capabilities that make new models possible, but must be paired with business model innovation to realize its potential.

*Example*: Remote patient monitoring technology enables new care models but requires complementary changes in staffing, workflows, payment models, and patient engagement to deliver value.

6. **Understanding barriers is essential for successful implementation**
   Healthcare innovation requires navigating complex regulatory, cultural, technical, and market barriers that vary by segment and geography.

*Example*: Hospital-at-home programs must address not only clinical and technical requirements but also state licensing rules, Medicare regulations, and ingrained expectations about what constitutes "hospital care."

7. **Sustainable innovations align incentives across the healthcare ecosystem**
   Long-term success depends on creating value for all key stakeholders rather than simply shifting costs or burdens from one to another.

*Example*: Successful value-based care models create shared savings arrangements that benefit both providers and payers while improving patient outcomes.