



The Modern Healthcare Value Chain is a Care-centric Supply Chain

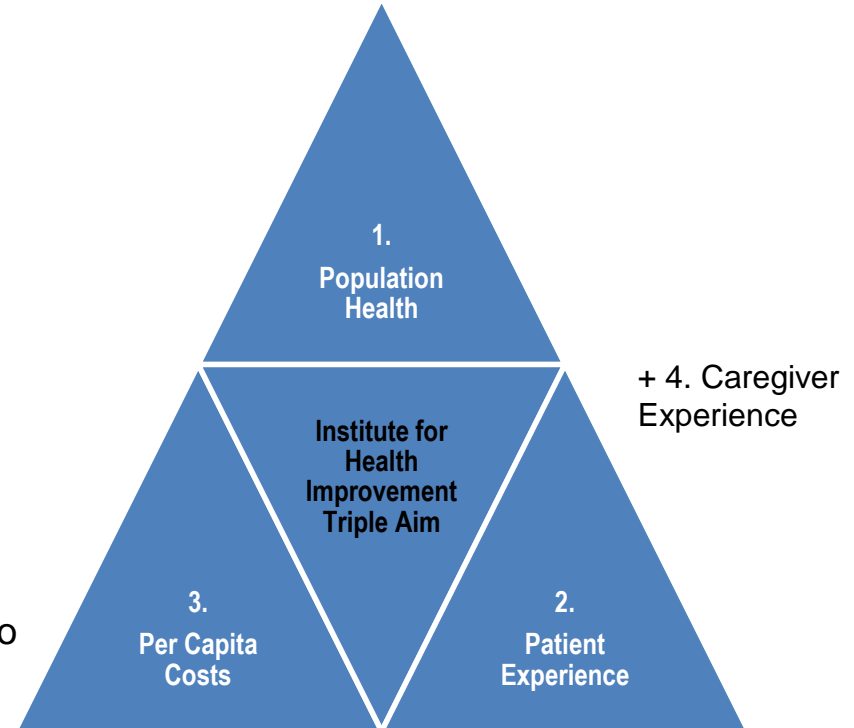
Hector Rodriguez, MBA
Oracle Healthcare Industry Vice President



Session Overview

Abstract:

- ❑ Healthcare organizations must leverage modern hybrid-cloud technology, cybersecurity and identity, and data to truly optimize healthcare outcomes and address the IHI Triple/Quadruple Aim objectives.
- ❑ In this session we'll explore the need to deconstruct and re-construct the traditional healthcare value chain into a data and process driven care-centric supply chain that is designed to provide real-time insights, intelligence, and decision support across operational and clinical systems.



A Quick Story*

www.dailyadvance.com/News/2019/03/24/Sentara.html

Sentara: Patient-centered care key to turnaround

By Jon Hawley
Staff Writer

Sunday, March 24, 2019

Talk to officials for both Sentara Albemarle Medical Center and Pasquotank County, and they'll generally tell you the hospital is doing well today.

Patient numbers are growing, quality of care is high, employee morale is generally good, and the hospital is financially stable even after large sums were spent on modernizing facilities and technology.



Problem: Emergency Room wait times were an immediate concern that 8% of patients left unseen.

Solution: More resources & better processes reduced wait time, now < 1% of patients leave without being seen.

Problem: Nurses found themselves without basic supplies, "There was one thermometer on a 40-bed unit.

Solution: Remediate gaps immediately. Modernization, technology investments, supply chain improvements.

*This is the presenters interpretation of a successful story of patient centered care which is what the care-centric supply chain must support.



JOIN THE CONVERSATION

© 2019 HITRUST

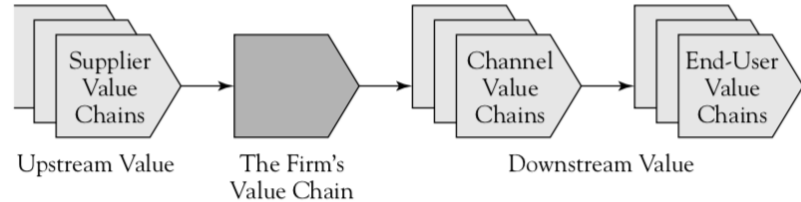
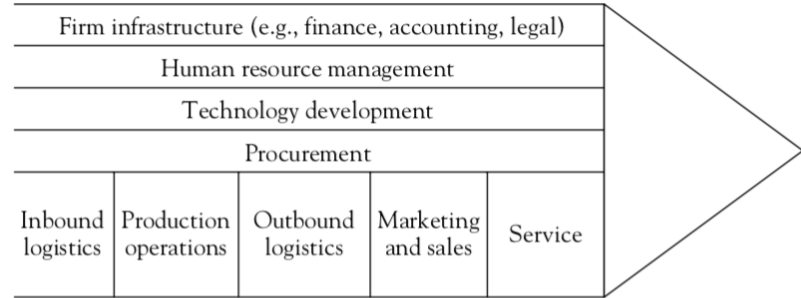


Value Chains and Supply Chains

Value Chains and Supply Chains

Michael Porter, a Harvard Business School Professor & Economist, defines a value chain as the end-to-end production chain from the input of raw materials to the output of final products and/or services.

→ Each link, or 3rd party*, in the chain should add value to the original inputs and the outputs.

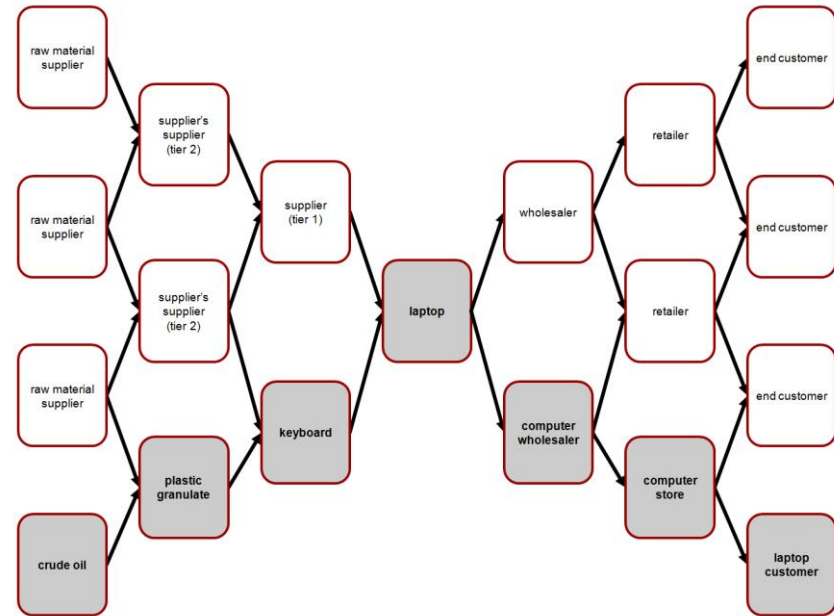


Source: Michael E. Porter. *Competitive Advantage: Creating and Sustaining Superior Performance*. Copyright © 1985, 1999. Adapted with the permission of the FREE Press, a division of Simon & Schuster, Inc.

***This is why 3rd Party Risk Management is Critical**

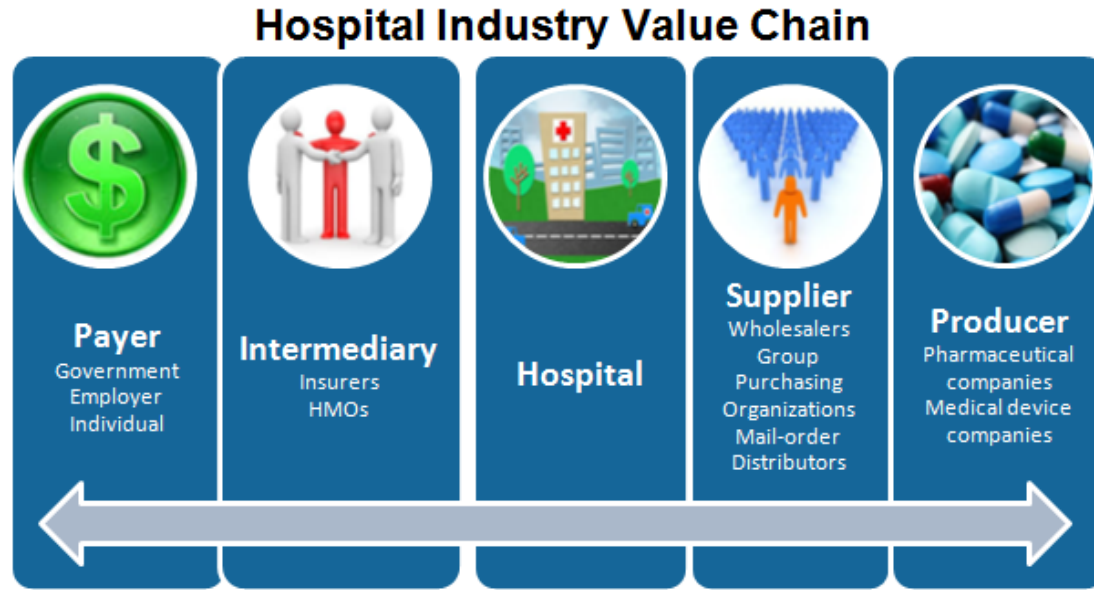
Value Chains and Supply Chains

An industry value-chain, also known as a Supply Chain, is the physical representation of the various processes involved in producing goods and services, starting with raw materials and ending with the delivered product



Source: https://en.wikipedia.org/wiki/Supply_chain

Traditional Healthcare Value Chain - 2001



Market Realist

Source: Wharton School Study of Healthcare Value Chain

Source: "The Wharton School Study of the Health Care Value Chain", <https://www.researchgate.net/publication/237614717>

What Happens When Value is Not Added?

- Healthcare is changing but the focus hasn't been on the supply chain
- Value is not being added, but subtracted
- Patient safety, outcomes, and experience is at risk
- Therefore the supply chain needs to be transformed

Healthcare Is Changing

Aging Population

- Chronic conditions
- Use of genomics
- Population health
- Risk

Competition for Caregivers

- Aging workforce
- Shortage of caregivers
- Clinician satisfaction
- Work / life balance

Industry Consolidation

- Growth
- Rationalization of services and locations
- Efficiency through scale

Care Delivery and Payment Models

- Increased spend not equating to outcomes
- Transition to value-based care
- Per capita cost
- Technology to enable innovation

Consumerism

- Patient experience
- Ratings and rankings
- Convenience
- Data portability

Compliance and Security

- Protected Health Information
- HIPAA / GDPR
- Cybersecurity
- Government reform
- HITRUST CSF, TPM, Shared Responsibility

Cost Pressures are Increasing

- Working Capital (Inventory)
- Approximately 10-30% of products expire on hospital shelves
- Excess inventories due to inefficient demand planning and static PAR (safety stock) levels
- Physician preferences resulting in product and cost variation
- Efficiency (SG&A)
- Clinicians spend an average of 17% of their time on inventory management or searching for equipment
- Recall efficiency – More than 4,500 drug and devices are recalled annually, ~10% have the potential to cause harm or death
- Assets (Property, Plant and Equipment)
- The average utilization of mobile clinical devices is only 42%

78% of hospital staff
face manual supply chain
management

Source: RevCycle Intelligence

Healthcare Outlook 2025

Growing and Aging Population

- Care in non-traditional sites will require greater supply chain reach and new processes
- Changes in demographics and rise of chronic conditions will change demand patterns

2x

Number of seniors age 65+ expected to double in the U.S. and exceed 10% globally by 2025.

U.S. Census Bureau & World Health Organization

Value Based Care

- New entrants, consolidation and expansion will require new distribution and optimization strategies
- Value based reimbursement emphasizes value beyond just price, putting the traditional GPO model at risk

50%

of current health systems will likely remain in the next 10 years based on the rate of consolidation

Deloitte Study

Care Innovation

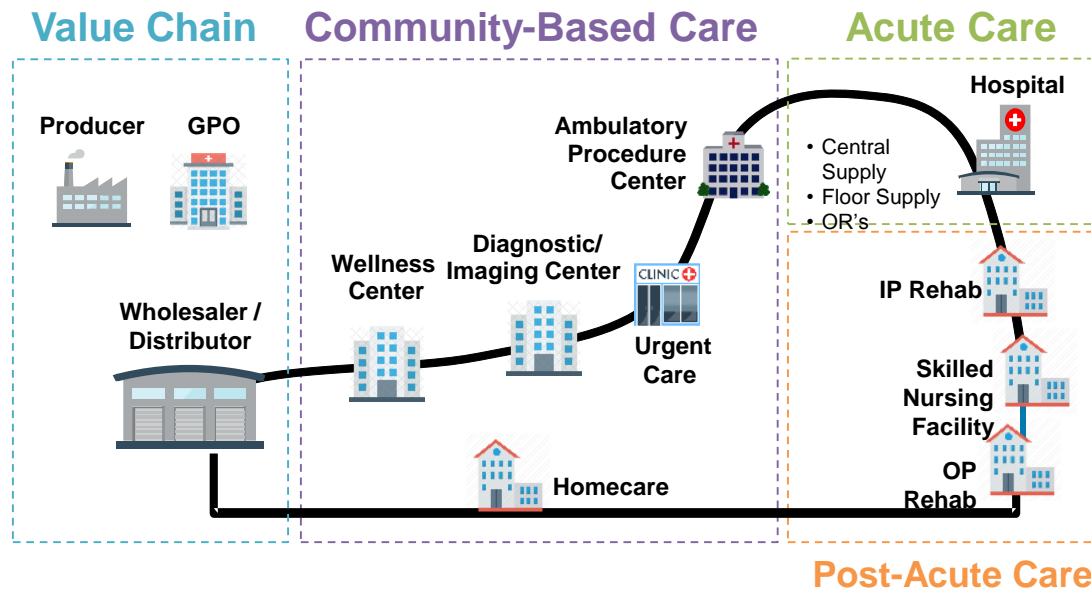
- Patient centered supply chains will require personal health data & use of medications to be easily shared across providers
- Growth of the virtual hospital will increase need for leasing / use of mobile assets

52%

of patient transactions are now online, virtual or via an app

Kaiser Permanente

Supply Chains Must Go Where the Patients Are



85%

of healthcare occurs
outside a hospital

David Kindig, M.D., Ph.D.
University of Wisconsin-Madison School of Medicine

Looking Beyond Price for Total Value

Clinical Outcomes Focused

Collaboration is key for Physician Preference Items (PPI) to reduce variation, cost and improve outcomes.

Patient Centred

Enable caregivers to spend less time on inventory and more time with patients by ensuring availability and recall efficiency.

Value and Demand Driven

Approximately 10-30% of products expire on hospital shelves and many PAR locations are static min/max levels resulting in excess.

Process Enabled

Driving true category management as well as having the right product, in the right place, at the right time requires process improvement consideration.

78%

of hospital staff face
manual supply chain
management

Source: RevCycle Intelligence

Supply Chain Use Cases Are Evolving

- Increase device utilization, notify staff when a bed is free, reduce emergency room wait time.
- Predict failure and enable digital twin simulation to avoid un-planned equipment downtime.
- Chatbots to assist caregivers to locate equipment or request inventory.
- React faster to supply chain events, recalls and drug authenticity.
- Enable smart contracts, HIE interoperability, alternative to EDI and secure data exchange.

21 minutes

Time spent by nurses per shift searching for lost equipment

Source: GE Healthcare

Connected and Intelligent Supply Chain

- Tomorrow's healthcare supply chain, today

Consolidate



Improve Profitability

Your digital supply chain platform

Cost-driven

Empowered people

- Driven by value based care
- Reduce inventory costs through streamlined supply chain processes
- Achieve a patient centered supply chain by aligning operations to patient needs

Accelerate



Accelerate Innovation

Broader, better, faster insights and decisions

Demand-driven

Forward-thinking

- Driven by consumerism
- Anticipate changing healthcare needs by supporting innovation
- Detect anomalies, predict future states, and identify root causes to support rapid decision making

Lead



Shape Business Outcomes

Adaptive intelligent supply chain

Value-driven

Visionary

- Driven by a changing population
- Expand the digital thread by connecting all assets
- Enable a frictionless supply chain that easily adapts to evolving patient-centric strategies

The Patient-Centered, Care-Centric Supply Chain

These four areas will –

- Improve safety and effectiveness of care, addressing the needs of the patient to improve outcomes
- Increase access to care through optimization strategies across the continuum of care
- Provide continuity to help patients care for themselves away from a clinical setting
- Engage in continuous process improvement that drives value to the patient



Clinical Outcomes
Focused



Optimized



Emerging
Technologies



Process Driven

Fundamental Reality Today and Questions to Ask

Common supply chain costs — clinician hoarding, upgrades and repairs, drug diversion, nonstandard ordering methods, and unnecessary product stockpiling

Supply chain not only about products, also about the people who buy, move, and use them

The human supply chain links — such as physicians, providers, manufacturers, and distributors — are failing to communicate cohesively and productively

Hospital executives need to be less focused on product price reduction and inventory streamlining and more attuned to the much larger supply chain picture

1. As a Supply Chain leader, am I ready to impact the Patient Experience & Outcomes?
2. Is my SCM solution powerful enough to enable transformation?
3. Am I prepared for the future of healthcare?

HITRUST®

Visit www.HITRUSTAlliance.net for more information

To view our latest documents, visit the [Content Spotlight](#)