

Can We Have Healthcare Reform without Supply Chain Reform?

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What Other Business Would Work Like This?

Supplies not seen as assets!

Supplies not managed as assets!

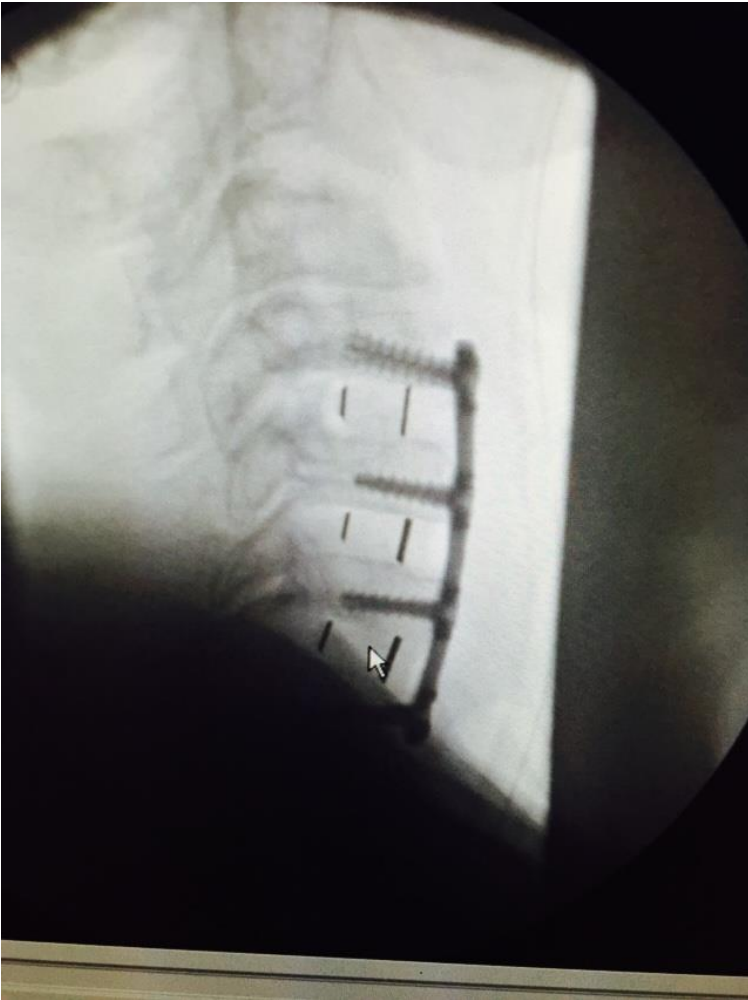
Suppliers do not share goals
with providers!

Providers do no share goals
with suppliers

Patients are In the Dark



Health Care – Wake Up!

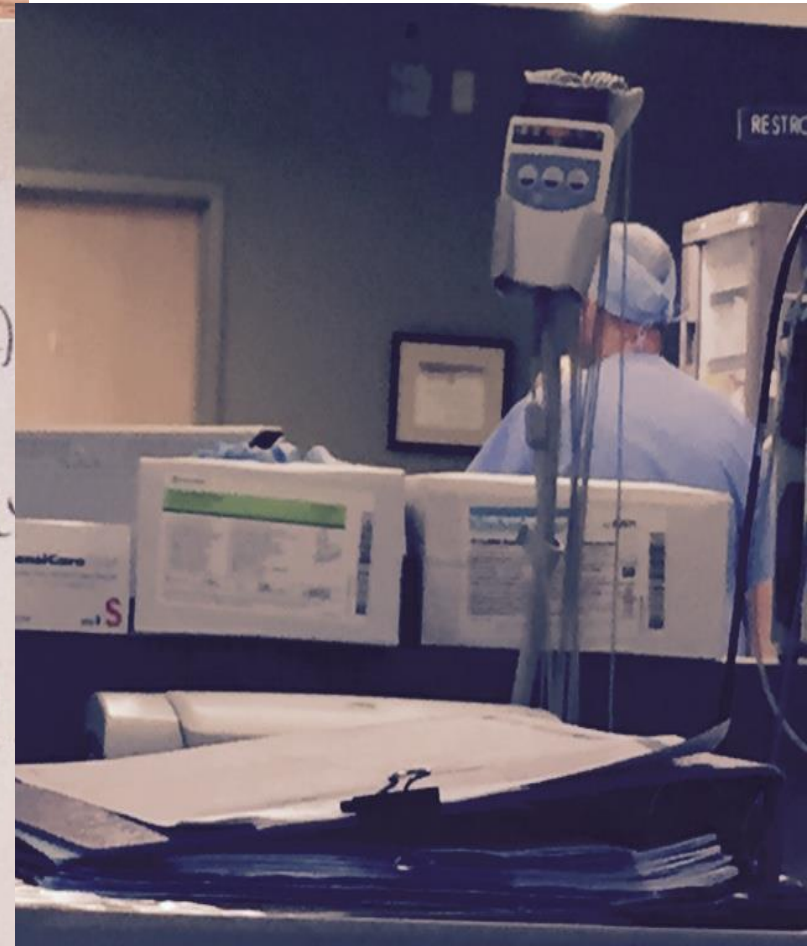


9790062
62.5 mm Venture Plate (1)

9790217
17 mm Fixed S.T. Screw (2)

9790315
15 mm variable S.T. screw (1)

9790317
17 mm variable S.T. screw (1)



Supply chains (SC) play a bigger role in healthcare than most realize ...

- SC consumes 25%-30% of hospital costs
- SC decision-making has not been coordinated nor leveraged.
 - Most decisions made independently by physicians and clerks.
- SC costs growing at more than double the inflation rate.

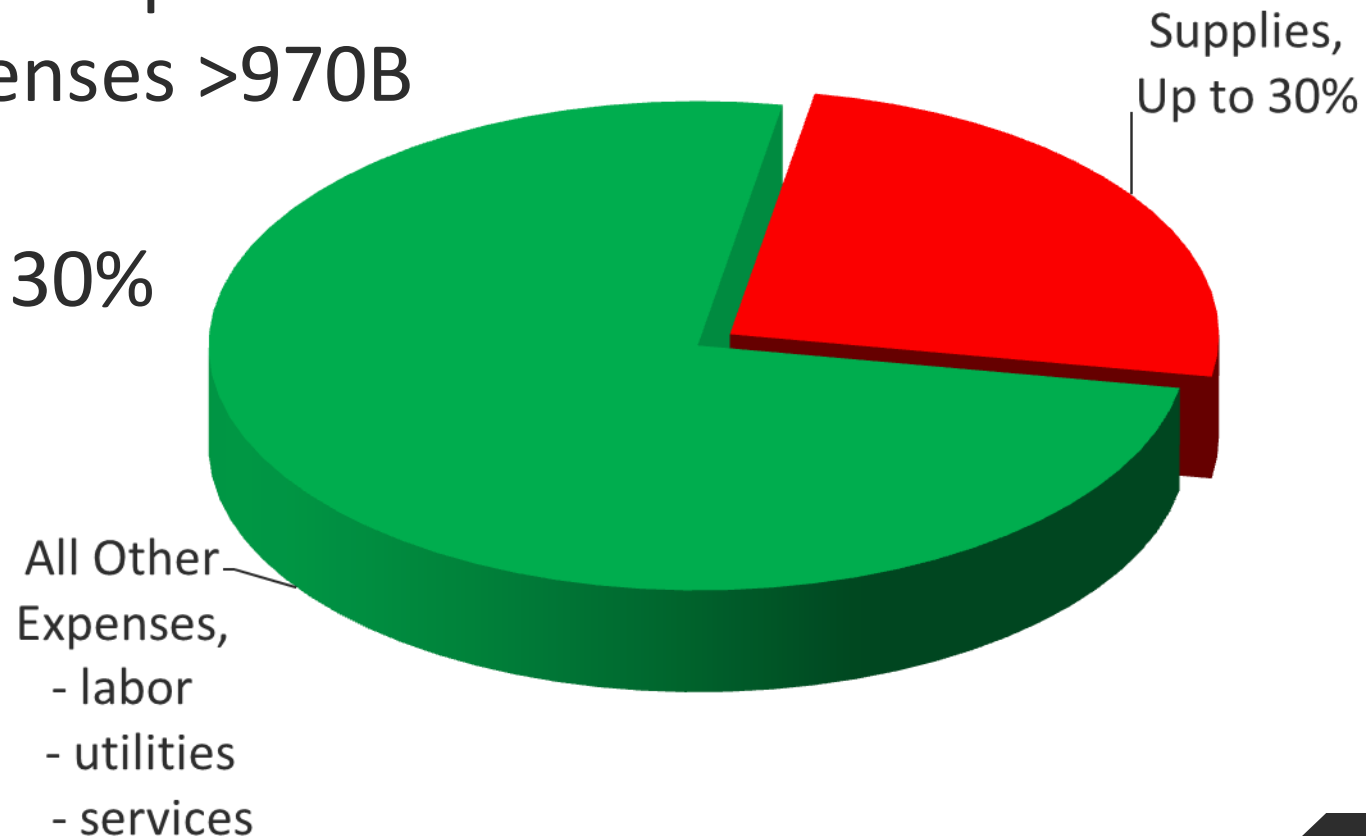
Supply chain management has become a mission critical administrative function.



Drive a large percent of U.S. Hospital Expenses

US Healthcare Expenses > 3 Trillion
Hospital Expenses > 970B

Supply Costs 30%



40+ Years of Adjustments

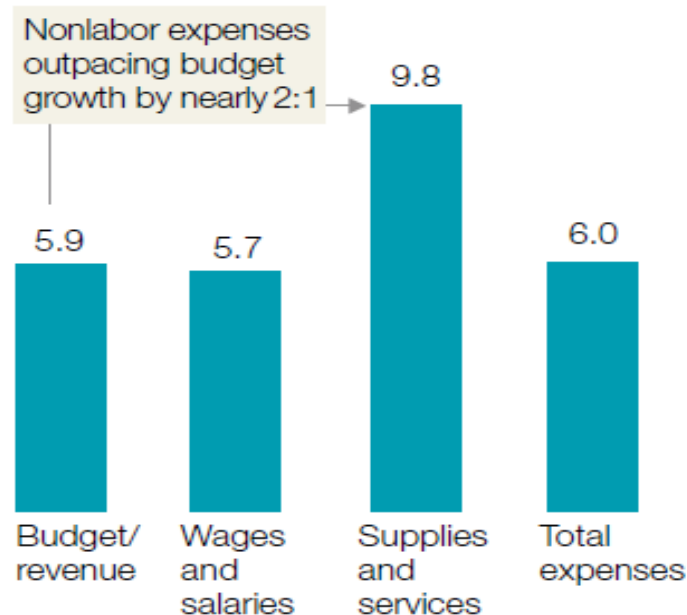
- Physicians
- Hospitals
- Insurance companies
- Patients
- Suppliers
 - Pharmaceutical, Devices
 - Drive innovation through R&D
- Strong focus on cure
- Little focus on “care”
- No mandated organizational structure



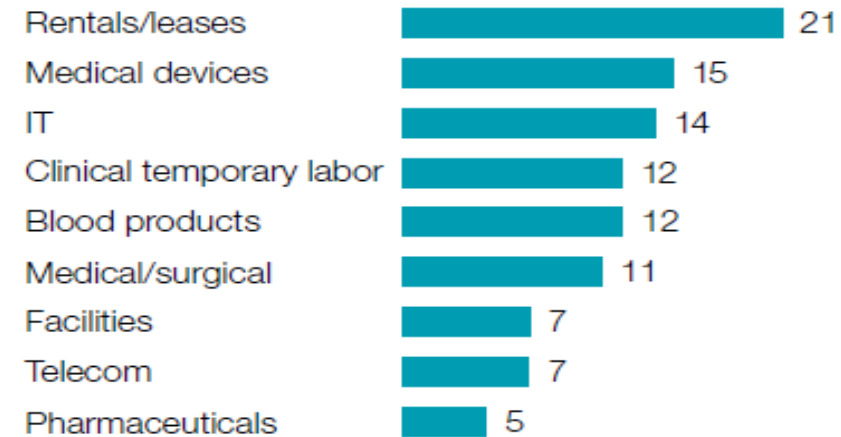
But healthcare supply costs are growing 50% faster than other expense categories ...

Growth in nonlabor costs is outpacing revenues at many hospitals.

Average 3-year compound annual growth rate (CAGR), %



Average 3-year CAGR, % (volume-adjusted)



Source: McKinsey

Without SCM attention, costs spiral out of control.



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Aligning Strategies in A Clinical Supply Chain



Preventing new non-value added spend just as critical as reducing current non-value added spend

Opportunity- \$800m hospital system has \$200m of supply chain expenses ...

- Saving 5% yields \$10m each year/ Saving 10% yields \$20m
 - Sourcing improvement
 - Inventory reduction
 - Standardization
 - Contract compliance
 - Product flow and network improvement
- With savings reinvested in patient care

A powerful contribution to system sustainability.



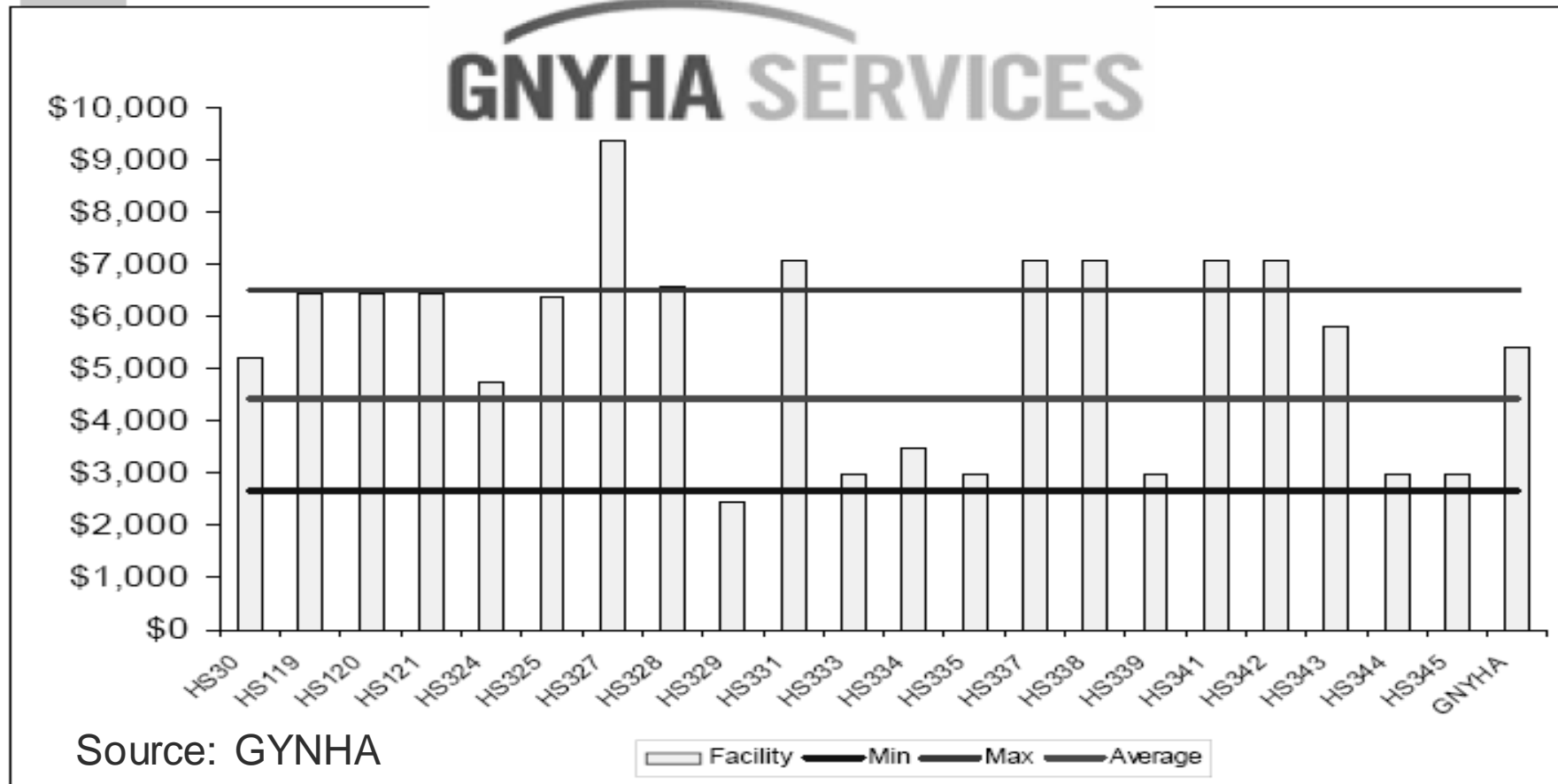
Failure → Risk

- FDA mandated plant shutdowns
- Counterfeiting
- Global product shortages
- Infected products
- Product recalls
- Supplier business failures
- Inventory management errors
- Natural disasters
- Wrong product labeling
- Forced implementation of non-preferential items
- Post merger integration conflicts

These risks demand Supply Chain Management attention.

Discrepancies Not Tolerated by Other Industries

Company D Knee System D *\$6,909 price variance within GNYHA*



Challenges

- Large number of discrete products (>50,000)
- Many different buyers, (hospitals, IDN, GPO).
- Physician as surrogate buyer
- Insurance as surrogate payer
- Lack of alignment of goals and trust
- Lack of transparency

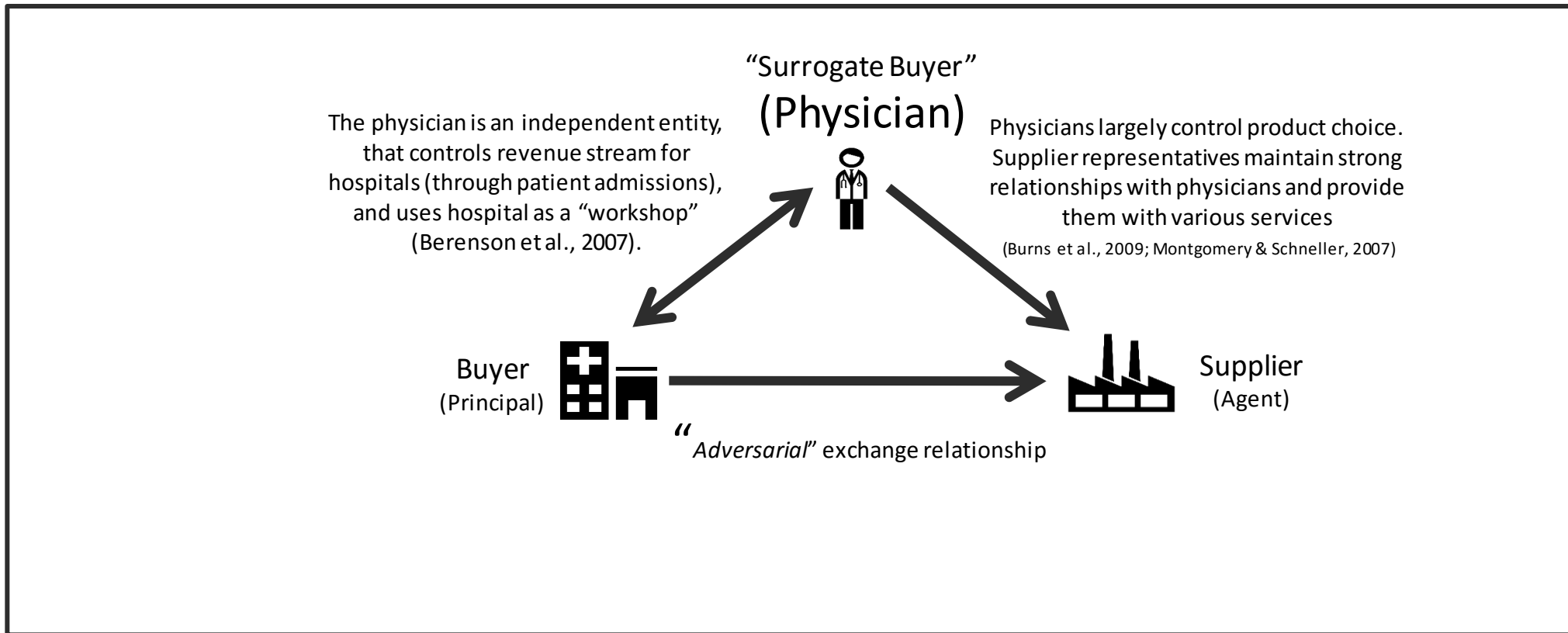
- **(Source: Absulsalam, Gopalakrishnan, Maltz & Schneller)**

Advanced Technology Intra-operative CT and Computer Aided Surgery



Why is Shaping the Supply Environment so Difficult?

Physician is a Surrogate Buyer



NHS

Procurement Development and Delivery Boards

- SC Costs > any other UK organization 20B Annually
- 257 individual Trusts with variable prices and products)
 - Promoting NHS acting as a single customer,
 - NHS ensure that all Trusts are working to a common strategy
 - Best practices built on private sector expertise.
 - “eProcurement strategy”
 - Promote supplier flexibility

NHS Planned to deliver £20 billion in savings by the end of the financial year 2014/2015

- **£1.2 billion** to come from improving procurement, as a strategic priority.
- Increase the range of products into areas such as implants to meet customers' needs
- Reduce catalogue from 600,000 product lines to 315,000
- Better manage four million orders per year, across 120,000 order points
- Consolidate orders from over 600 suppliers,
 - Remove the need for 40 direct deliveries per day
- We aim to work collaboratively with trust at this challenging time.

Australia (Victoria) Design and Centralize

- Purchasing under one public entity
- Increased annual contracts managed from \$237M to \$425M
- Cost savings of at least \$72 million
- 6:1 average return on investment.
- Promote flexibility to suppliers in meeting needs.

USA Reform

3+ Years of Reshaping Relationships, Professions & Processes

- Coverage Expansion
- Electronic Health Records & Meaningful Use
- Value Based Purchasing
- Accountable Care Organizations
- Bundled Payments
- Co-Management initiatives
- Comparative Effectiveness Research & patient centeredness

2010



HEALTH SECTOR SUPPLY CHAIN
RESEARCH CONSORTIUM

ASU W.P. CAREY
SCHOOL of BUSINESS
ARIZONA STATE UNIVERSITY

W. P. CAREY
SCHOOL of BUSINESS

U.S.A

Reform Without SC Focus

- No governmental or private agencies for procurement advancement.
- Diverse procurement processes and tools.
- Lack of interoperability/common platform
- Pay for the procured products as part of the DRG.
- No within industry benchmarks
- No cross-industry benchmarks
- Policy is punitive – leading to managing for policy sake

Why is Shaping the Supply Environment so Difficult?

- Institute of medicine:
 - “more than half of the treatments delivered today without clear evidence of effectiveness.”
 - Consequently, there is significant variation in treatment “with costs and outcomes differing markedly across the country.”

U.S.A. Strategy- Bundled Payments

The reimbursement of health care providers on the basis of expected costs for clinically-defined episodes of care including :

**Hospital
Physician
Post Acute Care
Home Health Care**

Supply Chain Becomes an Obvious
Contender for Leading Change



Bundled Payment Care Initiative

- A framework for how bundled payments in 67 markets,
- Goals
 - increased quality and lower inpatient costs – including SC
 - decreased length of stay
 - lower post-acute care costs
 - reductions in post-acute care costs
 - Reductions in hospital readmissions.“

Mandate for 67 Comprehensive Care for Joint Replacement (CJR) Communities

- Duration: five program years
- Episodes are triggered by an index admission to the acute care setting
- CJR episodes include the initial inpatient stay and all Medicare Part A and Part B services for 90 days post discharge,
- Hospitals will be responsible for the episodes of care; physicians, post-acute care providers.

~~Value For Money~~

Medicine's priorities are challenged if not changed

- Ensuring the sustainability of the system
- Assessment the value of products entering the field of practice –
- Needing to drive innovation
- Complying with regulatory and governance demands
- The call for transparency across the system
- Key to success is alignment between MD & System

Physicians and Information Weakest Link in the Materials Environment

- Narrow view of accountability
 - Rarely consider the “episode of care” – with end-to-end clinical and supply needs.
 - Have little focus on comparative value in technology
 - Not observed by payors.
 - Strong relationships with suppliers
- Mistrust of supply chain as an organizational effort
- Lack of comparative effectiveness research

So Why Bundled Payments? (& other capitated payments)

- 2.5 M Medicare Beneficiaries Receiving Hips or Knees in '14
- 7 B Cost for hospitalization –
- 343 M Medicare's Projected Saving –
- 4.7 M (1.5 population) have artificial knee
- 2.5 m (.8 population) have artificial hip
- Decrease in cost to CMS (NYU Medical Center) +/- 20%

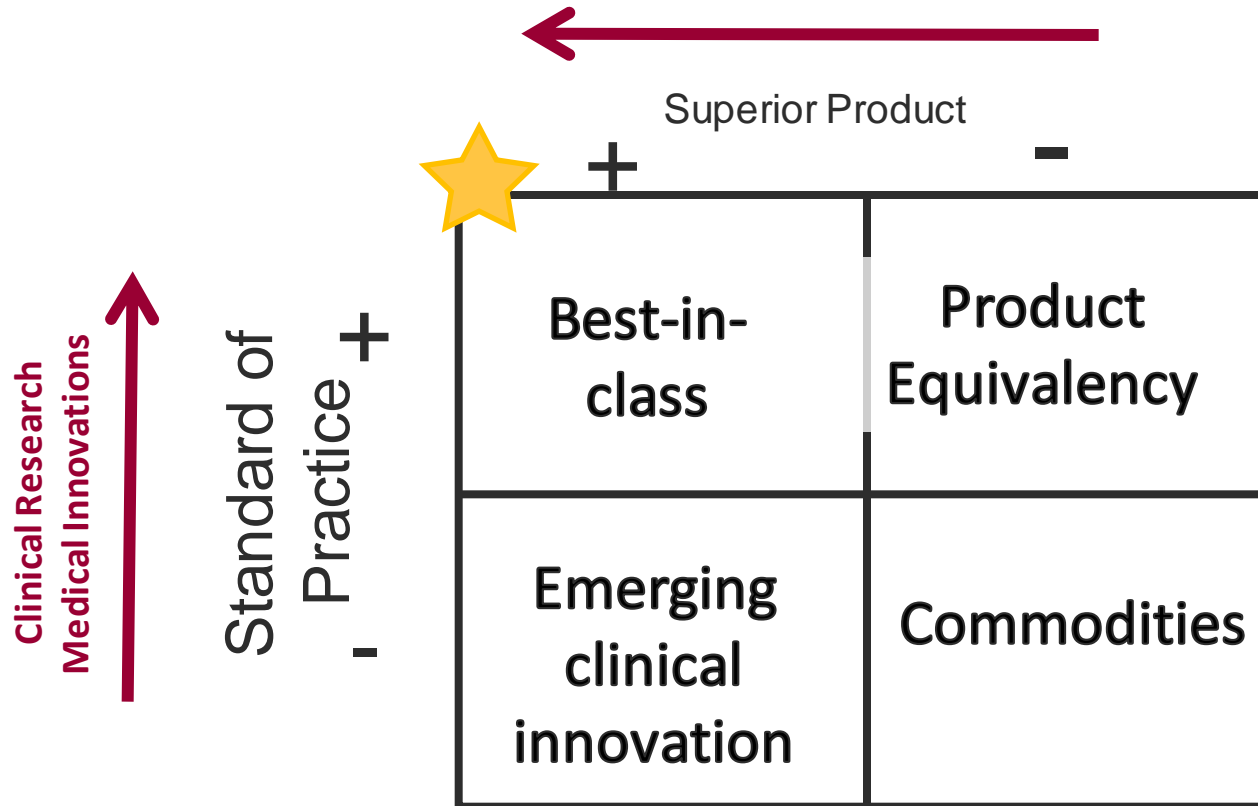
Not Just Government Purchasing

- Wal-Mart next year covers cardiac and spinal surgeries for more than one million U.S. employees and dependents through bundled payment agreements with six hospitals, including Cleveland Clinic and Mayo Clinic.
- The arrangement expands the partnership for transplant surgeries that launched in 1996 and will make Wal-Mart the first retailer to offer a national program that covers heart, spine, and transplant procedures.

Hips and Knees – Just the Tip of the Iceberg

- Medicare will launch a new bundled payment program for
 - Oncology care
 - AMI
 - Stroke
 - ?
- Worry financial incentives to control costs will prevent patients from getting the latest treatments.

Evidence-based medicine & Value analysis studies



Unbiased Estimates of Value are Difficult

- Devices evolve rapidly
- Have far reaching implications
 - Need for training
 - Impact on the org
 - Challenging to design clinical trials
 - Difficult to recruit wide samples
 - Implantables require long term follow up
 - Operator Impact is significant – and difficult to manage

Source: Matelli et. Al. A Systematic Review of the Level of Evidence in Economic Evaluation of Medical Devices.

Disadvantages

- **Scientific evidence in support has been minimal**
- **Does not discourage unnecessary episodes of care**
- **Potential that it could allow maximization of profit by avoiding patients with inadequate reimbursement**
- **May limit access to specialists during and inpatient stay**
- **Because patient may move among providers, may be difficult to assign financial accountability**
- **Some illnesses may not fall neatly in to —episodic definition**
- **Bundles may overlap**

Role for Supply Chain Management

- Engaging suppliers for win-win performance
 - a. Difficult to do on a one-to-one basis
 - b. Contracts drive trusting relationships in the health sector
 - c. Having the reps share your goals
- So what is the value of driving volume to best supplier/product?
 - a. Convincing suppliers you are a worthy partner
 - b. Assuring your patients and payors that you have the best products for the best price
 - c. Picking products that make a difference
 - d. Establishing trusting relationships with suppliers
 - e. Bringing your own ideas to the marketplace

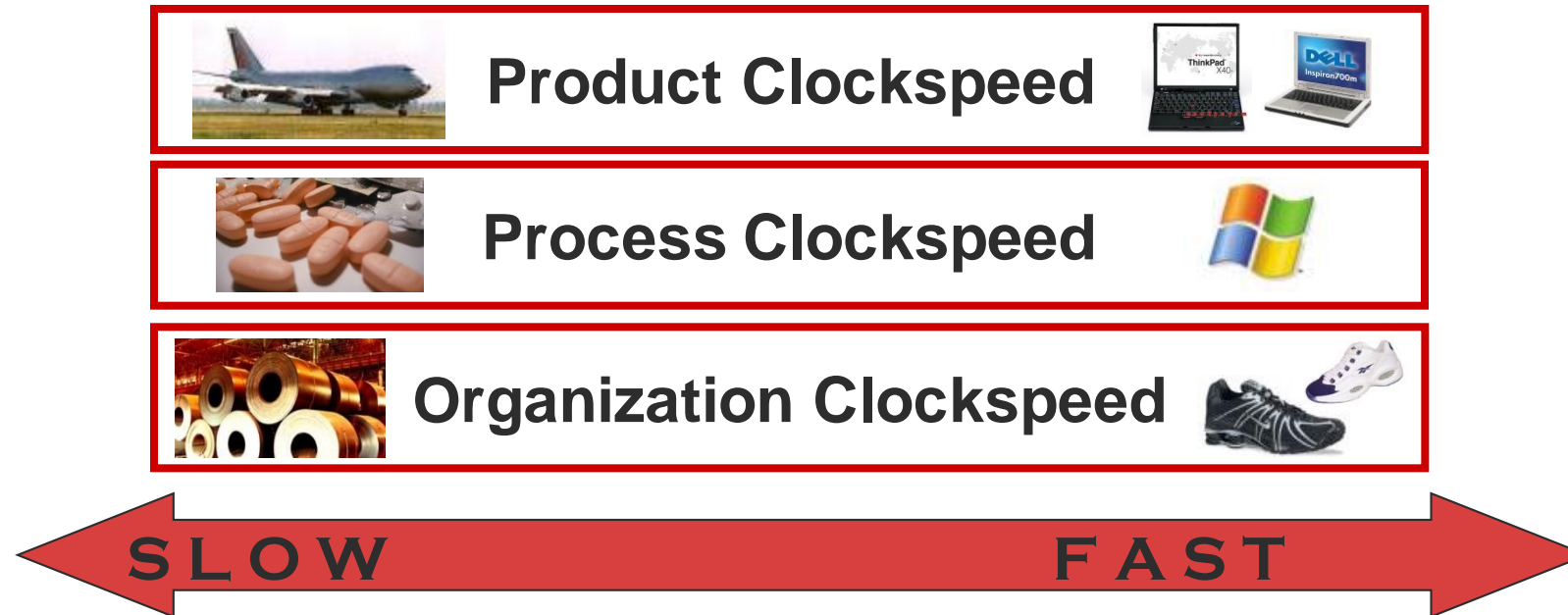
Redesign of Organization of Care

Recommendation

Move to Demand Based Purchasing

- Demand based purchasing focus
 - “assets that promote excellence in patient outcomes”
 - Clear expectations for purchasing and outcomes
 - procurement program must facilitate interaction and trust among all members of the supply chain.
 - Episode of care costing – a
 - A new purchasing focus: life-cycle costing to replace the lowest initial cost rational and to maximize total supply chain surplus (Edler & Georghiou, 2007, p. 960).

Recommendation: Structure Around Product Clockspeed



Source: Adopted from Charles Fine – Clockspeed

Transforming Care?

- "Bundled payment brings alignment with physicians that allow
 - hospitals to cut their variable costs
 - reduce postsurgical complications
 - reduce pharmacy costs
 - reduce length of stay."
 - Jay Sultan, associate vice president and general manager of payment reform at the TriZetto Group
- Requires coordination across services with different:
- Clockspeeds
- Modularities
 - For some procedures, such as hips and knees
 - more than half of the cost occurred post-surgery
 - with the bulk of that cost occurring in either the acute inpatient rehabilitation units or the sub-acute rehabilitation units of SNFs.

Recommendation: Manage to Reflect Goals

Traditional Metrics

- Perfect Order Rate
- Inventory Turnover Rate
- Contract Utilization Rate
- Supply Attribution Value
- Stock Inventory Fill Rate

Advanced Metrics

(Linked to Corporate)

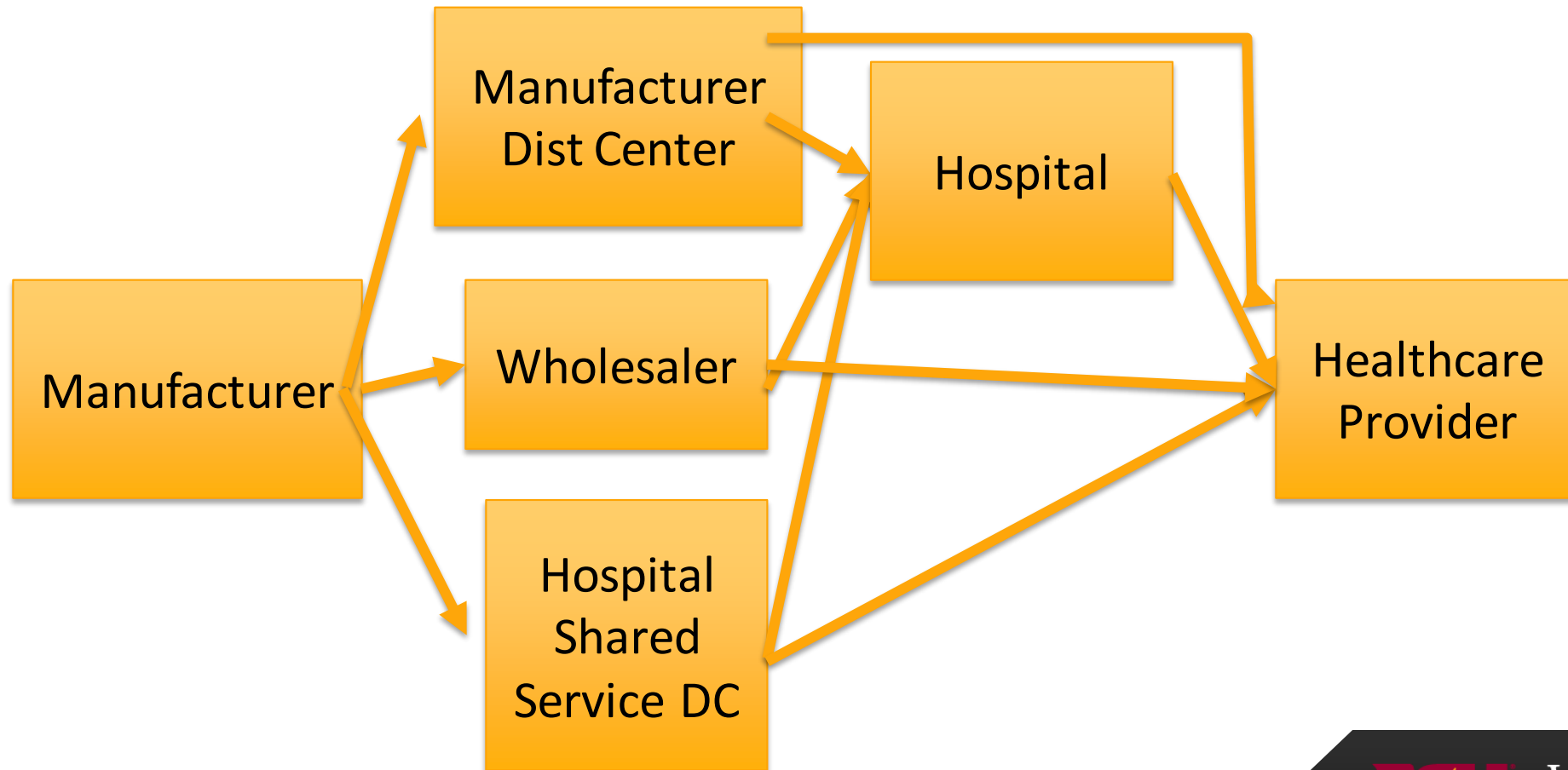
- Infection reduction through SCM infused change
- Readmission reduction through SCM infused change
- Community benefit through SCM infused change
- Clinical integration through SCM infused change

Challenge to supply chain

- Departments and various professionals interface for the first time
 - Consider organization of staff, within and across the departments that touch patient may need to be altered
 - Consistency in products across services will require standardization
 - Supply chain is extended into post acute care settings
 - Supply chain is extended into the home care setting
- What happens at each node is relevant to all nodes in a patient's care

Recommendation: Smooth Complex Networks

At least six different network designs here ...



Recommendation: Be Disciplined in Outsourcing Decisions

- The Dreamliner Consequence
- The project was billions of dollars over budget and three years behind schedule.
- Need to redesign new role to integrate outsourced contractors

www.forbes.com/sites/stevedenning/2013/01/21/what-went-wrong-at-boeing/

Principles of SC Within Reform Context

- Practice
- Education
- Policy

SC Reform at the Practice Level

- Incorporate materials within the context of evidence based medicine to drive evidence based SC
- Define SC as a leading edge competency
- Build SC capability
- Position SC in the executive suite at VP level
- Develop an ideology of end-to-end supply chain (pre admission, acute care, post acute care and home care).
- Build supplier/provider relationship strategy

Toward a New Procurement Paradigm

Traditional Procurement Paradigm

Primary value is cost reduction, satisfying internal customers and securing external supplies & services

Competitive pressure and leverage over suppliers is key to value

Internal focus is on stakeholder compliance and low levels of transparency

Manage transactions

Analytic skills

Own and execute

Adopted from Jonathan Hughes and Danny Ertel



Toward a New Procurement Paradigm

New Procurement Paradigm

Primary value is solving business and clinical problems

Collaboration with suppliers and balanced dependence is key to value

Internal focus is on being a trusted advisor to the business – both clinicians and management and greater transparency with external stakeholders

Manage relationships

Business acumen and soft skills

Facilitate and enable

Adopted from Jonathan Hughes and Danny Ertel



From Products to Services: Sourcing of Services Solutions and Innovations

	Value Drivers of What is Being Sourced	Key Strategies and Skills Required
Sourcing Innovation	<ul style="list-style-type: none"> • Creative Ideas for both product & Services • Risk Taking • New Investment 	<ul style="list-style-type: none"> • Joint problem solving and co-creation • Learning from failure
Sourcing Solutions	<ul style="list-style-type: none"> • Knowledge and expertise • Ability to integrate assets and capabilities 	<ul style="list-style-type: none"> • Communicate context • Applies to changes comparison
Sourcing Services	<ul style="list-style-type: none"> • People • Talent management systems 	<ul style="list-style-type: none"> • Creative payment and incentive structures
Sourcing Goods	<ul style="list-style-type: none"> • Process • Scale • Prior Capital Investment 	<ul style="list-style-type: none"> • Tight specification • Competitive Pressure

SC Reform At the Educational Level

- Establish SC curriculum as a key to being a “reflective practitioner”
 - Medical Education
 - Nursing Education
 - Health Management Education
 - Physician Executive Leadership Education

SC Reform at the National Policy Level

National support for Demand-based purchasing –
Incentives at a DARPA Level (Defense Advanced Research
Projects Agency)

- Reward suppliers for product development to meet policy goals. (DARPA Model)
- Continued support for comparative effectiveness research focused on devices
- Relax barriers associated with co-production

Establish National Center for Health Sector Supply Chain Management

- **Jointly with NSF and AHRQ**
- **Develop benchmarks for HC based on best health sector practices in US and abroad.**
- **Carry out studies on translational supply chain practices incorporating into health care lessons from other industries.**
- **Provide a neutral environment for supplier/provider product development**
- **Inform payors on impact of supply chain as a result of changes in clinical and reimbursement policy**
- **Sharing HHS policy priorities with regard to healthcare supply chain**
- *Opportunities to test new ideas on a national level*
- **Opportunities for brain storming with other players in the supply chain sector to optimize trust and transparency**

For Further Thoughts

