Rethinking Supply Chains in Response to COVID-19
Upcoming CleanMed Virtual sessions

Sept. 23
Keeping sustainability front and center

Sept. 30
How 1 hospital added 48k plants and improved community health

Oct. 7
Resilience from farm to plate

Oct. 14
Rethinking supply chains in response to COVID-19

Oct. 21
Collaborating to build resilient health care

Oct. 29
Clinical sustainability: Environmental stewardship at the bedside
To ask a question

The Q&A panel can be used to ask questions of the panelist(s). The questions will be reviewed by a moderator and may be answered live at the end of the session. To ask a question, click on the Q&A button at the bottom of your screen and type your question into the box and click Send.
Lessons in the world of COVID-19

- Tremendous supply chain vulnerabilities were exposed
- The value of resilient supply chains during crises was proven
- Health care facilities’ long-running sustainability commitments were challenged in some cases
- During crises, vulnerable populations are disproportionately affected
Opportunities for the health care system

- Provide leadership and drive innovation in preparation for future crises
- Serve as community anchors for equity, inclusivity, and sustainability
- Address social determinants of health through purchasing
Our panelists

Dartmouth-Hitchcock Health
VP of Supply Chain

Curtis Lancaster

Intermountain Healthcare
Strategic Supplier Management

Shane Hughes, CPSM
Rethinking Supply Chain Because of the Pandemic

Dartmouth-Hitchcock Health

Curtis Lancaster
VP Supply Chain Dartmouth-Hitchcock Health
<table>
<thead>
<tr>
<th>Fact</th>
<th>Number/Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outpatient Visits</td>
<td>1,800,000</td>
</tr>
<tr>
<td>Total Patients Discharged</td>
<td>30,000</td>
</tr>
<tr>
<td>Operations Performed</td>
<td>&gt; 22,000</td>
</tr>
<tr>
<td>Births</td>
<td>1,200</td>
</tr>
<tr>
<td>Emergency Department Visits</td>
<td>31,000</td>
</tr>
<tr>
<td>Volunteer Hours</td>
<td>35,000</td>
</tr>
<tr>
<td>O/P Revenue</td>
<td>$2.3 billion</td>
</tr>
<tr>
<td>Employees</td>
<td>&gt; 13,000</td>
</tr>
<tr>
<td>Physicians, residents, Fellows</td>
<td>&gt; 1,395</td>
</tr>
<tr>
<td>Nurses</td>
<td>&gt; 1,925</td>
</tr>
<tr>
<td>Allied Health Professionals</td>
<td>&gt; 1,437</td>
</tr>
</tbody>
</table>

NH’s only Academic Medical Center (Research, Teaching, and Patient Care)
NH’s only Tertiary Referral Center
NH’s only NCI-designated Comprehensive Cancer Center
NH’s only Level 1 Trauma Center
NH’s only Comprehensive Full-Service Children’s Hospital (CHaD)
NH’s Level III Neonatal ICN and only Pediatric ICU
Operates the only Helicopter Transport Service (DHART)
The Supply Chain is in Constant Change. The Pandemic Magnified Our Need to do Something About It

Recent Supply Disrupting Events

- Fire at Rubber Factory Brazil 10/1
- Port Disruptions Sydney, Australia 9/30
- Chinese County Declares Emergency Over Bubonic Plague Death 9/29
- Philippines New Outbreaks African Swine Fever 9/25
- Record Rise Coronavirus Cases Malaysia 9/24
- Earthquake 5.9 Coast of Crete 9/18
**Timeline and Events**

- **Jan 03**
  - Flu-like pneumonia outbreak in Wuhan
  - Cases reported in Thailand, South Korea, Japan

- **Jan 04**
  - Virus alert in China

- **Jan 20**
  - WHO holds emergency meeting
  - UVMHN SC alerts leaders of potential supply disruption and response

- **Jan 21**
  - 1st case in WA, USA

- **Jan 24**
  - WHO holds emergency meeting
  - UVMHN SC alerts leaders of potential supply disruption and response

- **Jan 25**
  - Resilinc World Wide session on Corona Virus

- **Jan 29**
  - DHH/UVMHN SC connects with Government Relations (Canadian border, KN95, Customs)

- **Feb 26**
  - Stand up Network Supply Chain PPE process

- **Mar 15**
  - DHH/UVMHN SC connects with Government Relations (Canadian border, KN95, Customs)

- **Mar 18**
  - Joint sourcing DHH/UVMHN, SOV for PPE

- **April 20**
  - PAN VT Hospital Supply Chain meetings

- **May 20**
  - Joint PPE orders reach $13.5M
  - Typical PPE orders are $1.5M

- **May 27**
  - DHH/UVMHN commence daily call
Pre-Covid, Yes. Covid, YES: We monitor our suppliers for vulnerability across the globe to build resiliency into our Supply Chain.
Growing Ecosystem of Suppliers

- # Unique Suppliers: 3,726
- Suppliers Sites: 40,844
- Parts Mapped to Sites: 219,390
- Suppliers with >=2 Sites: 2,682
- Countries these sites are in: 115
- Sub-Tier Suppliers: 6,825
- Sub-Tier Sites: 56,444
- Site Level BCPs: 933
- Events History: 7 Years

- 202 Single Source Parts
- 60 Multi-Source Parts

Dartmouth-Hitchcock Health
Our Response to the Pandemic

The critical success factor was trust in the team we developed and communication to the right audience with the right message.

- Rapid Response Team
- Divide and Conquer—D-HH and UVMHN
- Logistics Flexibility—Water, Canada
- Government Affairs
- Analytics to monitor the market
- Data to inform purchases

Our Strategic Plan Guides Us
Our Strategy Guides Us Through the Change
D-HH Four Strategic Pillars

- People
- Innovation
- Technology/Analytics
- Trade
We Had to Rethink Our Business. We focused on Our Trade Pillar to Start.

- What happened?
- Why/How did we become so dependent on others?
- How do we regain control?
- What does that start to look like?
Strategic Transformation
Trade Pillar

- As local as possible
- Closer to the manufacturer
- From offshore to near/on shore
- Disintermediate where can
- Pay attention to raw materials
We had an Awakening. Sourcing is Changing

- Raw Materials
  - Global
  - Varied
  - Many
- Interdependency Magnified
  - Raw materials
  - Goods in process
  - Finished goods
  - Delivered goods
  - Goods ready to use
  - Goods disposed/reused
Strategic Pillar: People

- **Attract**
  - Design a compelling org chart supported by contemporary job descriptions.
  - Ensure a cultural fit and shared strategic vision.
  - Move quickly to hire.

- **Develop**
  - Identify emerging leaders.
  - Provide meaningful growth and educational opportunities.
  - Focus on execution and rapid constructive feedback.

- **Retain**
  - Promote and enable skills development.
  - Inclusion in meaningful projects.
  - Provide professional development opportunities
Pathways to Success

- **Develop an org chart with contemporary positions** - Program Manager, Demand Planner, Resiliency Manager

- **Voice of the employee** - YAWL

- **Cultural fit, define and model the culture you want**
  - Establish Supply Chain Culture Committee
  - Seek diversity and inclusion in our workforce
  - Value Based Behaviors

- **Establish division branding “We Support the Hands that Heal”**

- **Look for the skills needed now and the future** - Advanced robotics, AI, Synthetic Biology, Deep machine learning

- **Move quickly to get the right people in the right seats** - Bias to develop
Strategic Pillar: Innovation

**Think Different**
- Challenge existing processes by adopting other industry best practices
- Create a flexible, nimble, and patient-centered supply chain
- Embrace the improbable (synthetic biology, AI, advanced robotics)

**Plan Different**
- Leverage and enhance your brand to attract disruptors and innovators
- Develop staff who embrace change

**Do Different**
- Be clinically integrated and technology enabled
- Upgrade and expand your skillset to prepare for the future

Dartmouth-Hitchcock Health
Strategic Pillar: Innovation – Embrace the Improbable

*Services to be provided in different ways - on demand, virtual, and in non-traditional settings.*

**Today**
- Source directly from global contract manufacturers
- Hone our analytical capabilities to improve margin
- Develop a People Strategy and use it
- Encourage sustainability (green)

**Tomorrow**
- Provide “last mile deliveries” direct to home
- Leverage robotics and automation
- Explore drone delivery of medical supplies to remote locations
- Supply Chain leaders upgrading and expanding their skillset
- Embrace change
- Partnering directly with sources

Think Different  
Plan Different  
Do Different

Dartmouth-Hitchcock Health
How to Integrate Sustainability into Supply Chain Resiliency?

• Know the raw materials to reduce/eliminate chemicals of concern
• Collaborate on design to reduce harmful material, support reuse
• Reshore/Invest to influence the raw materials used
• Go local to reduce carbon footprint
• Reuse creatively, dispose lightly
• Refill, Not landfill

• Leading the messaging to executives and adjusting our goals
  – Not just price but continuity of supply
  – Social Determinants of Health as a value lever
  – Climate Change
Thank you!
Rethinking Supply Chains In Response To COVID-19

CleanMed October 14, 2020

Shane Hughes, CPSM
Strategic Supplier Management
An Integrated Health System with a Tradition of Innovation

Helping people live the healthiest lives possible™

Based in Salt Lake City, Utah

39,000 employees
$2 B non-labor spend
AA+ Standard & Poor’s
Aa1 Moody’s

Hospitals
- 1975 Began
- 24 Hospitals
- 2,800 Beds

Health Plans
- 1983 Started
- SelectHealth
- 900,000 Members

Medical Group
- 1994 Started
- 1,400 Employed physicians
- 4,000 Affiliated physicians
- 185+ Clinics

Continuum Care
- TeleHealth
- Homecare
- Life Flight
- Central lab
- Central pharmacy

Intalere
- 1986 Started
- 2015 Ownership
- Commercial platform
- $8B Spend GPO
Intermountain Economic Contribution

Utah GDP
$9.8B
6.6% of Utah Economy

Utah Jobs
143,346
7.7% of Jobs

Net Tax Revenue To State
$436.3M
4.8% of Total Tax Revenue

*Source: Intermountain Healthcare, 2016
Helping people live the healthiest lives possible®
Rethinking Healthcare’s Role in Our Communities

Financially Stable Communities

• Thriving diverse businesses
• Access to affordable healthcare and housing
• Education
• Community safety

Anchor Institutions

• Supplier diversity
• Impact Investing
• Sustainability
• Community wealth building
Sustainable Procurement

Leading by being a Model

• Policy & Contract Language
• Local & Neighborhood Purchasing
  o Supplier development
• Supplier Diversity Program
• Sustainability Efforts
  o Removing PVC & DEHP
Managing Supply Chain Risk and Disruption
COVID-19 Lessons Learned

Successes
• Validation of self-distribution model
• Leveraged strategic supplier relationships
• Necessary technology in place for inventory adjustments, pandemic planning and emergency management
• Community engagement
  • Project Protect
  • Reusing PPE

Opportunities
• Repatriating commodities
  • Understanding local & neighborhood supplier capacity
• Streamline decision making process for pandemic planning
• Rethink supplier rationalization in key categories
• One Intermountain approach for pandemic inventory and emergency management
Supplier Risk and Business Continuity Manager

• Supply Chain Mapping
  o Critical products & suppliers
    ▪ Including chemicals of concern

• Centralized Supplier Risk Dashboard
  o Integrating key internal departments
    ▪ Compliance, Risk, Legal, Supply Chain, Cybersecurity
Why must we fundamentally change our Supply Chain?

Community Stability

- Supplier diversity through local and diverse purchasing
- Impact Investing in developing our at-risk businesses and affordable housing
- Creating equity as a leader in our communities

Sustainability

- Shortening our supply chain
  - Local manufacturing where possible
- Removing chemicals of concern in our item master
- Creating visibility in our supply chain from raw materials to reuse or disposal
THANK YOU

Shane Hughes, CPSM
Shane.Hughes@imail.org
Groundbreaking new guide!

- Provides step-by-step guidance to develop a sustainable procurement strategy
- Prioritizes community/environmental health and safety while reducing costs
- Available to Practice Greenhealth members

http://practicegreenhealth.org/sustainableprocurementguide
“preventative medicine”
60-80% of health care’s greenhouse gas emission are embedded in goods and services
Potential cost savings from sustainable procurement in hospitals.
Sustainable Procurement in Health Care Guide
Practice Greenhealth
Questions?

- Further reading from HCWH:
  - *Our supply chain is sick. Health care can heal it.*
  - *Beyond COVID-19: Toward healthy people, a healthy planet, justice, and equity*
Chefs, are you ready?

★ Increase sales
★ Entice new customers
★ Improve satisfaction
★ Serve trending plant-forward food
★ Gain celebrity

CONTEST RUNS OCT. 1 - NOV. 30
noharm.org/culinarycontest
Join us for our next session

Collaborating to build resilient health care

Wednesday, October 21, 2020 | 2:00 – 3:00 p.m. ET

Visit CleanMed.org to learn more and register