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Harmonized Services

From pharmacy to supply chain to clinical operations, Yale New Haven Health's Lorraine Lee has expanded her role – and contribution – to her health system's collective goals.

Lorraine Lee, Senior Vice President, Clinical Operations
Yale New Haven Health

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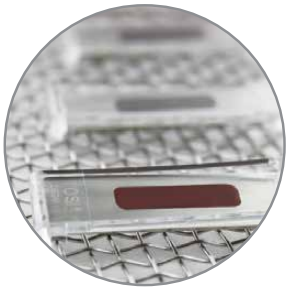

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Feature

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» pg16

JOHN PRITCHARD

Disruption, Elevation, and Visibility

Well, here we are, over two years into the pandemic. Looking at COVID-19's impact on the healthcare supply chain, three things in particular have changed, perhaps forever.

Supply disruptions have become commonplace

Before the pandemic, supply interruptions were rare. I can really only think of a couple times when there were significant outages – during the Beijing Olympics and when hurricanes hit the Caribbean. Other than that, I don't recall supply chain leaders en masse complaining about supply interruptions.

Also, before it seemed like supply chain leaders were working hard to have everybody operating at the top of their capability or license. Then we started to have supply disruptions that were not quickly alleviated. Earlier this week, I spoke to a supply chain leader of a major IDN, and he lamented how his daily routine consisted almost entirely of looking for one product after another. I worry that these disruptions will not alleviate for years to come without some consolidated clearinghouse marrying supply and demand visibility.

The elevation of supply chain as a strategic role

Before the pandemic, supply chain was viewed in hospitals and IDNs as an important activity or even a skilled discipline. As the pandemic hit hard in early 2020, it became apparent how important supply chain was to health systems. Supply chain quickly became viewed as the frontline protector of healthcare provider's patients, employees and clinicians.

I don't see this going away anytime soon. I believe supply chain will not only be responsible for ensuring supplies, but also coordinating much of the risk management within health systems. Now more than ever, healthcare providers should be focused on talent development for today's and tomorrow's challenges.

Trade partners must have visibility into supply

Trade partners will no longer have the luxury of believing supply is continuous. For a successful future, and the continued supply of products and services, sourcing professionals will need to see into their supplier's supply chain. Having visibility into product in transit, finished goods, work in progress and raw materials will certainly become commonplace in the contracting and sourcing processes of tomorrow. While this will add a level of complexity in the healthcare supply chain, it will also add a level of resiliency dearly needed in our ever-changing world.

Whatever great challenges lie ahead, I have all the faith in the world we will continue to prosper as an industry. I hope you enjoy this issue of *The Journal of Healthcare Contracting*.

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Tackling Supply Shortages

Raw material scarcities, port backlogs, shipping delays, truck driver deficiencies all contribute to issues the healthcare supply chain faces.

Amid a striking uptick in Covid patients due to the latest surge over the holidays, health systems are also facing extended medical supply shortages and continuing to care for other patients. These supply deficits are impacting many necessities of care and are driven by raw material shortfalls, port backlogs, shipping delays and truck driver shortages for transporting goods. They include everything from crutches to syringes, needles, tubing, gloves catheters, drapes for surgery, suction canisters for medical waste, urine cups and more.

Supply shortages are so severe that some health systems have even asked their local communities for donations of gently used crutches and other medical equipment. Raw material shortfalls like aluminum for crutches, for example, impede the production of medical devices as well as labor shortages related to Covid sweeping through manufacturing facilities. These issues were acerbated by consumer demand during the holidays that assured supply chain problems were sustained, and parts needed for medical devices were used in other consumer products.

The Journal of Healthcare Contracting (JHC) surveyed supply chain leaders from health systems about the medical supply shortages.

JHC: **Have you experienced any of these disruptions and shortages? If so, how are you mitigating them?**

Amanda Chawla, VP and Chief Supply Chain Officer of Stanford Health Care (Stanford, CA): Yes, anyone who works in the supply chain can attest to its impact on the way we operate in how we prepare and respond. Supply disruptions are not a matter of IF anymore, but a matter of WHEN. Affected categories have been wide ranging. The most notable include solutions, pediatric-specific supplies, core lab supplies, sterile surgical gloves and other products like suction canisters, DME (durable medical equipment) and OR specific. Some categories have limited options on alternatives.

Our number of product disruptions on a monthly basis is approximately 1,300. Daily, we receive about 80% of our orders from distributors. However, through the phenomenal work of our shortages task force and teams, including the substitution task force, the empty bin rate at the PAR locations is only 2% with no viable substitute – either due to clinical requirement or lack of product reliability.

Stanford has a multipronged approach in response to, mitigation of, and preparation for disruptions. From a dedicated resiliency team to warehouse and stockpiling strategies, which are least preferred, to an operating daily and clinical integration infrastructure. Stanford Supply Chain has a cross-functional, intra-supply chain team that incorporates every department within the supply chain organization, along with our primary distributor, into a shortage's task force. There are two external interactive taskforces: one known as the Substitution Taskforce (STF) and the other as the Supply Chain Utilization Practice Taskforce (SCUP). These teams meet regularly to support and manage the response to disruptions.

Steve Faup, Divisional Director, Supply Chain of Capital Health (Trenton, NJ): We've experienced all of [these disruptions and shortages] and more. For example, a vendor was working on a follow-up to a delivery problem and admitted the shipment was in transit at a staging center 600 miles away but there were no drivers available. It's apparent there is frustration realized by everyone involved.

We have grown from an average of 20 backorders per day in August to up to 40 per day now. Sometimes [substitutes] are available, but not necessarily through the original vendor of choice. Also, substitutes can create a change in process or practice, which might require clinical education.


Amanda Chawla

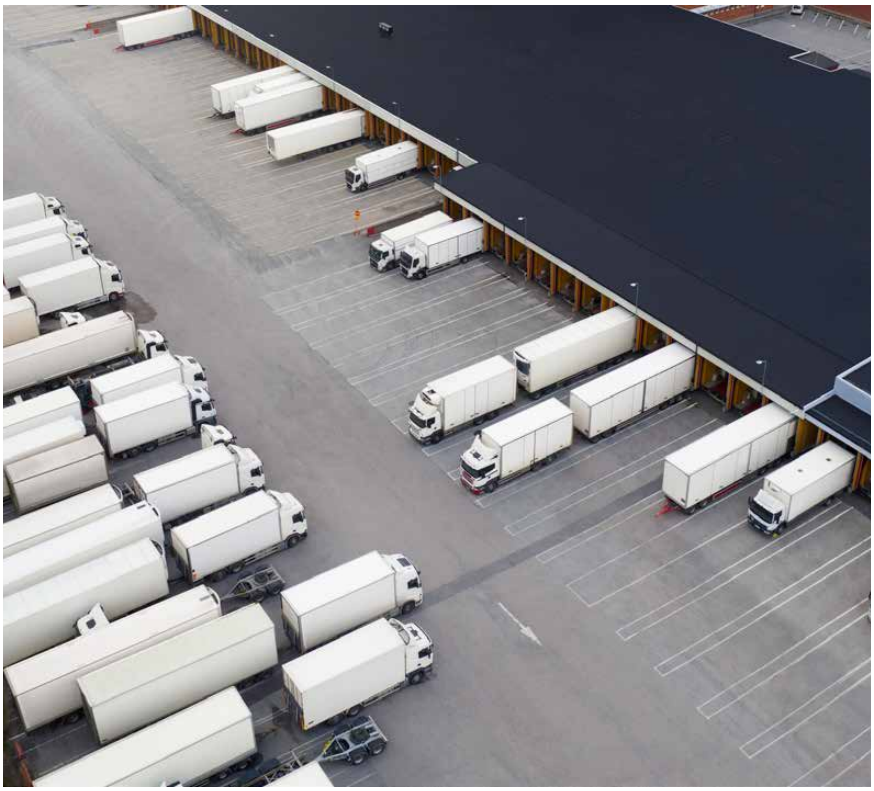

Erik Walerius


George Godfrey


Steve Faup

We work with our customers to identify options and utilize all our internal supply chain resources to cycle through the vendors for products. We developed some new vendor relationships during the past 18 months that were not part of the typical healthcare supply chain, and we've continued to include them as resources. And a couple of our vendors have committed to a longer term pipeline for specific products.

George Godfrey, Corporate VP and Chief Supply Chain Officer of Baptist Health (South Florida): We have been experiencing these types of shortages since fall 2020. The shortages have been in all areas. It has affected mostly overseas production of finished goods and we are notified of approximately 20 to 25 distinct backorders per day.



Hundreds of products continue to be on allocation or backordered across multiple categories including bedside care, when items drop off and new ones are added.

We are closely monitoring on-hand, available stock within our distribution center, while maintaining a data set of clinically approved substitutes and finding alternative sourcing throughout multiple avenues.

Erik Walerius, Chief Supply Chain Officer of UW Medicine (Seattle, WA): Hundreds of products continue to be on allocation or backordered across multiple categories including bedside care, when items drop off and new ones are added. Currently, we have 450 backordered items. Substitutes are available for many but not all items.

JHC: **Have you asked clinicians to conserve supplies?**

Chawla, Stanford Health Care: Yes, particularly in instances where clinical equivalent substitutes are not reliable or not available. Bringing about awareness fosters partnerships and helps to eliminate any waste while promoting sustainability.

Faup, Capital Health: Yes [we have]. Some good examples include targeted processes like utilizing vacutainers for only what is necessary during a blood draw and avoiding wasted tubes. Past practice included filling a predetermined volume of tubes as backups. The pharmacy department has designated specific departments to receive vendor-supplied prefilled syringes based on the need for longer expiration dating. Pharmacy staff is building prefills for departments that will use them in a shorter time period.

These options are available and supported because of strong clinical leadership.

Godfrey, Baptist Health: Not in all instances of product shortages. We did put conservation strategies in place early in the pandemic for PPE and other specific product shortages. However, our hospitals demonstrate an absolute need for clinical supply with each request for product, so we do our best to find another avenue to source product whenever possible and only use restricted ordering in the most severe of shortages.

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Walerius, UW Medicine: Yes, via committee decisions in partnership with members representing clinicians, clinical education, infection prevention and supply chain. Conservation tactics were needed when substitutes were not deemed clinically acceptable.

JHC: **Have you paid for expedited shipping due to long lead times?**

Chawla, Stanford Health Care: Yes. With volume increases and the lack of reliable, proactive information on disruptions, Stanford has had to respond at times with rush and expedited orders.

Faup, Capital Health: [We have] since March 2020. While most PPE supplies have become more readily available, the supply and demand issues with other items has forced the continued practice of expedited shipping. The product shortages are unpredictable. A steadily flowing item through our supply distribution system can become an allocated or unavailable item in a few days.

Godfrey, Baptist Health: We have, but before we rush to a judgement on expediting shipments, we first review our inventory position versus demand and only accelerate the shipping on urgent and low on-hand inventory. We have also empowered our procurement teams to expedite inbound stock when usage outweighs available stock.

Walerius, UW Medicine: Yes.

JHC: **How long do you anticipate these supply delays and shortages to persist?**

Chawla, Stanford Health Care: Supply shortages and disruptions will always occur. The question is to what frequency and degree of impact. Both of which are unknown and almost impossible to forecast in the current climate.

Faup, Capital Health: Who predicted the current issues would exist? At the beginning of the pandemic, it was a three- to six-month prediction, then eventually it was 18 months. Now there are predictions for another 18 to 24 months. That would make a total timeframe of three and a half years. Other factors are popping up to create new hurdles, including available warehouse space and the rising costs associated with it. For example, available storage and warehouse space is decreasing on a regional basis while increased lease costs are ranging from 25% to 60%.

These are all real components and without fixing each one, roadblocks in the flow of goods will continue. Infrastructure is not an overnight fix. And while healthcare does not represent a majority of goods, we should have better representation as a critical component of need.

Godfrey, Baptist Health: We anticipate at least another nine to 15 months of supply constraints. The bullwhip effect on supply chain seems to have a long tail of recovery.

Walerius, UW Medicine: Most, if not all, of CY 2022 and potentially spilling into CY 2023 for various items and categories.

JHC: **If you are contracted with a GPO, have you had to purchase supplies outside of the contract? Are you concerned about contracting prices when they come up for renewal?**

Chawla, Stanford Health Care: When products are not available through the primary or preferred or contracted channel, we will turn to alternate sourcing options to ensure our healing hands have the right products at the right time to care for our patients.

Yes, there is a concern about price increases, and equally, there is a need for greater visibility into the supply chain and reliability. We have experienced price increases with a few contracted supplies as well.

Faup, Capital Health: Through my conversations with various hospital and health system supply chain leaders, we have all purchased outside of contracts when products and services weren't available within the existing agreements. We view all products as having the potential for price increases beyond what has been the industry benchmark. I believe GPOs should be able to utilize their larger relationships to help manage these increases.

Godfrey, Baptist Health: We engage our GPO partners early in the communication to source outside of the contractual path for the understanding of deviations.

Walerius, UW Medicine: Yes, requests for price increases are already occurring. ■

We view all products as having the potential for price increases beyond what has been the industry benchmark. I believe GPOs should be able to utilize their larger relationships to help manage these increases.

BY DANIEL BEAIRD

The Healthcare Continuum Takes on Staffing Shortages

Supply chain leaders examine how their health systems are handling clinical and non-clinical personnel deficits.

Recently in California, the state's department of public health temporarily changed its coronavirus guidelines to allow asymptomatic, COVID-19 positive healthcare workers back to work without isolating or testing. The guidelines were in effect from Jan. 8 to Feb. 1 to curb the critical staffing shortages experienced across the healthcare continuum, the state health department stated. The California Nurses Association criticized the decision.

Many healthcare workers burned out by the pandemic have quit. Many that remain have tested positive for the coronavirus and are isolating. Healthcare facilities are busier than last year due to more demand for non-COVID related care. Where does this leave the nation's health systems with staffing issues? How are they being mitigated?

The *Journal of Healthcare Contracting (JHC)* surveyed supply chain leaders from health systems about the medical staff shortages.

***JHC*: There are staffing shortages amongst hospitals in general. Clinician burnout along with the resurgence of COVID-19 in high infection regions has pushed workforce management to the front of the line. How are staffing shortages affecting how you take care of your patients?**

George Godfrey, Corporate VP and Chief Supply Chain Officer of Baptist Health (South Florida): We take incremental steps to make certain that patient care is never impacted. This takes additional time and resources to properly manage staff scheduling and deployment.

Erik Walerius, Chief Supply Chain Officer of UW Medicine (Seattle, WA): Increased use of overtime and temporary labor to fill in staffing challenges to avoid clinical impacts.

***JHC*: Have noncritical services been cut back due to staffing shortages?**

Steve Faup, Divisional Director, Supply Chain of Capital Health (Trenton, NJ): In some cases, there has been a scale back of available hours. An example would be Food and Nutrition Services. Their resources are focused on patient care. The pre-pandemic hours of operations and offerings for walkup service have been modified.

Godfrey, Baptist Health: At this time, only minimal cutbacks have been made to non-clinical services.

Walerius, UW Medicine: Earlier in the pandemic, supply chain services not directly related to clinical services were reprioritized to support pandemic-related efforts.

***JHC*: Have vaccine mandates contributed to staffing shortages?**

Faup, Capital Health: There are many issues feeding the labor shortages. Mandates are contributing but probably not a significant factor.

Godfrey, Baptist Health: As an organization, we moved toward vaccine mandates for all employees during fall 2021. We created a vaccine campaign across the organization to provide not only the shots across our many hospitals and urgent cares, but also to provide information, research and clinical support for those employees who expressed reservations about the vaccine process. As a supply chain department, we reinforced the organization's approach to get everyone vaccinated with strong, weekly communication to our teams to provide any necessary resources needed to get our team 100% vaccinated.

Walerius, UW Medicine: Yes, but minimal.

EDITOR'S NOTE: *Healthcare workers covered by the Biden administration's vaccine mandate will have until March 15 to be fully vaccinated in the 24 states where the requirement was reinstated by the Supreme Court. Twenty-five states and Washington, D.C., continue to face a Feb. 28 deadline for covered healthcare workers to be fully vaccinated, as the mandate had not been blocked in those states before the Supreme Court order that came down in January. The mandate, issued by the U.S. Department of Health Services' Centers for Medicare and Medicaid – remains blocked in Texas (at time of publication).*

***JHC*: How has pandemic burnout contributed to staffing shortages?**

Faup, Capital Health: Absolutely, and it has become increasingly documented within a variety of industries and specific jobs. For example, nurses and truck drivers.

UPMC launches in-house travel staffing agency to address nursing shortage

UPMC has created UPMC Travel Staffing, a new in-house travel staffing agency as a solution to the nationwide nursing shortage and to attract and retain highly skilled nurses and surgical technologists to its workforce. UPMC is believed to be the first health system in the country to launch its own staffing agency – initially for registered nurses and surgical technologists, with the potential to evolve to include additional job roles.

UPMC has brought in external travel nurses and surgical technologists to help at the bedside and in operating rooms throughout the past year. The goal of UPMC Travel Staffing is to rely less on outside agency staff and empower UPMC employees who would like to travel to UPMC hospitals across Pennsylvania, Maryland and New York – wherever and whenever the need is greatest. This new program will provide needed support for our frontline caregivers and career growth opportunities for UPMC nurses and surgical technologists interested in travel. Not only will the program be a retention tool for our current staff, it also will fuel a new pipeline to recruit nurses to UPMC and to bring people back who left UPMC, according to a release.

The advantages of this innovative program include competitive wages and excellent benefits that are unmatched by outside travel agencies, such as tuition assistance. The program also offers vast career growth opportunities and diverse clinical experience working and living temporarily in communities across UPMC's footprint. UPMC Travel Staffing will rotate nurses and surgical technologists to different facilities for six-week assignments.

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Godfrey, Baptist Health: We have seen vaccines within both clinical and non-clinical positions during the duration of this pandemic. The return back to a fully staffed team is slow, at best. We are nearly 24 months into a remarkable and relentless pace due to the pandemic, with a constant push and pull on all fronts of our industry, and people are fatigued. Additionally, the added lifestyle impacts of being remote and remaining socially distant for so long have added to the stress, strain and exhaustion of our troops. If you take all of those factors and add them to the historic amount of workforce that has left the employment pool, our ability to maintain a fully staffed supply chain team in some areas has been difficult.

Walerius, UW Medicine: An increase has been seen in early retirements and moves to other hospital departments and transfers have increased.

***JHC*: What are you doing to attract staff and stave off shortages?**

Godfrey, Baptist Health: We have been very communicative as an organization regarding our needs for staffing across the network. The organization has increased the referral bonus for employees in an effort to get our current workforce to refer qualified candidates for internal opportunities throughout our network. Additionally, our internal HR, training and development teams have been very forthcoming with information about our own internal training and internship opportunities for clinical and pharmaceutical careers to promote, teach and train our own team members who may want to pursue those areas.

Walerius, UW Medicine: Strategies include hybrid and remote working for applicable jobs and extensive HR recruitment tactics. ■

CDC guidance

In December 2021, as healthcare staffing shortages began to mount due to the transmissibility of the COVID-19 omicron variant wreaking havoc across the country the CDC issued guidance designed to enhance protection for healthcare personnel, patients and visitors, and address concerns about potential impacts on the healthcare system. Maintaining appropriate staffing in healthcare facilities is essential to providing a safe work environment for healthcare personnel and for safe patient care.

The CDC said when staffing shortages are anticipated, healthcare facilities and employers should use contingency capacity strategies to plan and prepare for mitigating this problem. They included:

- Adjusting staff schedules, hiring additional healthcare personnel and rotating personnel to positions that support patient care activities.
- Developing regional plans to identify designated healthcare facilities or alternate care sites with adequate staffing to care for patients with infection.
- Allowing asymptomatic personnel who had a higher risk exposure to COVID-19 and are not known to be infected with COVID-19 and have not received all vaccine doses to continue to work onsite throughout their 14-day post-exposure period.
- Allowing personnel with infections who are well enough and willing to work to return. Those with mild to moderate illness who are not moderately to severely immunocompromised and at least five days have passed since symptoms first appeared and at least 24 hours have passed since last fever without the use of fever-reducing medications, and symptoms have improved.
- If shortages continue despite other mitigation strategies, as a last resort consider allowing personnel to work even if they have suspected or confirmed infection, if they are well enough and willing to work, even if they have not met all return to work criteria.

Preparing for the healthcare supply chain 'new normal' in 2022

In early November, the White House released key performance indicators measuring progress in clearing bottlenecks throughout the U.S. supply chain. The metrics showed an "abnormally high" number of container ships awaiting berth at the ports of Los Angeles and Long Beach, which together handle 40% of containerized imports entering the country.[1]

Congestion at major ports of discharge translates to product backorders and delays further down the supply chain across industries. Increased freight, transportation and materials costs — along with labor shortages — also factor into this.

However, if we narrow the focus to the healthcare supply chain, the short-term outlook materializes as a steady state through the end of 2021, with relief just over the horizon. "We hope to see improvement in 2022 as we all learn how to better navigate the landscape," says Jack Slagle, vice president of category management at McKesson Medical-Surgical.

"It's just a slow and murky supply chain right now, and it will take time to dig out of transportation challenges," adds Slagle. "The good news is that manufacturing lines are up and running, and overall production is healthy."

Healthcare-specific products

Amid current supply chain uncertainty, McKesson monitors more than 41,000 critical care products and communicates areas of concern to customers. Proactive oversight reveals that most suppliers' production levels are at full capacity for goods needed by primary care providers, according to Slagle. For instance, after periods of widespread shortages, personal protective equipment and infection-prevention items (for example, gowns, N95 masks and gloves) are readily available.

"This is largely attributable to McKesson's due diligence to diversify and expand our domestic and global supplier base to ensure that we are providing our customers with quality products from socially responsible manufacturers," Slagle explains.

At-risk categories include durable medical equipment, exam tables and other exam room items that have extended lead times. Other challenges vary by manufacturer. "Suppliers that produce full truckload shipments of large, bulky products are typically in a tougher situation than a supplier that produces sutures," Slagle points out.

Moving forward, enhanced healthcare supply chain management is going to require transparency, collaboration and frequent communication between distributors and suppliers. Organizations across the medical supply chain must work together to help improve production and smooth out problem areas in order to achieve a "new normal."

McKesson's recent action items include running backhauls to suppliers, expanding ordering lead times and providing more accurate forecasting to customers. Additionally, some suppliers have agreed to cut back production in low-demand categories to help increase and expedite production in high-demand categories.

Assistance and advice for providers

Just as suppliers and distributors need to collaborate, healthcare providers should maintain an open dialogue with distribution teams regarding supply chain requirements. According to Scott McDade, McKesson relentlessly strives to improve customer service levels and can help in the following areas:

- Working with manufacturers to ship products directly to customers

- Utilizing technology and data analytics to view current inventory levels and cross-reference for alternative products
- Requesting formulary adjustments and/or identifying conservation strategies for critical and high-demand categories
- Expanding customers' networks to include neighboring systems, local manufacturers and suppliers

Further, as the cold/flu season approaches its peak, primary care practices must make sure that they have enough vital supplies. "Plan, prepare and perform," advises John Harris, vice president of strategic accounts, laboratory at McKesson. "Proactively work with your distributor to assess market conditions and stay up to date with your product needs and availability. This includes monitoring disease prevalence in your area and understanding trending patient care needs and acuity levels. [And] have flexible protocols in place to accept alternative options and methods if you can."

Expect to see more physician offices and retail pharmacy chains setting up clinical services, including rapid COVID tests and other lab offerings. Harris noted that McKesson plans on being ready with respiratory testing solutions it can administer to patients at the point of care.

Managing day-to-day inventory concerns

It takes a resourceful collaborator to work through the unique medical and pharmaceutical supply chain issues that have cropped up at health systems and provider practices across the country. McKesson Medical-Surgical's experience includes these recent examples:

- When a customer needed 100 wheelchairs to support a vaccine center, only 40 were available at the time. McKesson searched for alternatives through its SupplyManager℠ online ordering tool, which enables product comparisons, and located 60 transport chairs as acceptable substitutes.
- Another customer requested a specific type of hand sanitizer for wall-mounted dispensers at their facility. Although the exact sanitizer was not available, McKesson worked with three different manufacturers to ship alternative options from their existing inventories of ready-to-sell products.
- When a health system needed a large order of traditional crutches, which were unavailable, McKesson supplied forearm crutches as a viable alternative.
- Nurses at another health system needed an out-of-stock size of surgical masks. McKesson located a supply of children's masks that successfully completed the order and fit the nurses who needed them.

Staying ahead of the curve

As we look toward the first half of 2022, healthcare supply chain stakeholders — public and private — are going to prioritize medical supply movement through the U.S. transportation system. Consequently, flexibility, teamwork and planning are going to prove key components of effective supply chain management in the months ahead.

Customers should keep in mind that distributors and their representatives can "do the heavy lifting for you," comments Slagle. "McKesson specializes in the non-acute, alternative-site distribution business and can provide the solutions and strategies that support getting customers through some of the recent challenges." Nonetheless, he recommends, "If you have significant product needs or are working on an expansion project that will require new equipment, large supply or pharmaceutical orders, let your distributor(s) know as soon as possible. The more time you allow for order planning, the better the outcome will be for you and your patients."

Concurrently, healthcare providers can do their part to help avoid potential supply chain concerns. "Stay in close contact with your distributor to understand the measures they are taking and categories that may present challenges in the near future," suggests McDade. "Take action now to build alternative product formularies so you can make decisions before an issue arises." Finally, "Make sure your teams exercise conservation efforts in at-risk categories," he adds.

In an environment of across-the-board collaboration, organizations of all types are committing resources to help improve the medical supply chain. McKesson plans on continuing to advocate for providers in nonacute, alternate care site facilities "to make sure we have the appropriate processes in place to get products to physician offices, surgery centers and even patients' homes," observes McDade.

"With time and patience, we are confident that things will continue to improve, and we are working hard to make this a better supply chain overall," Slagle concludes. ■

For more information, visit mms.mckesson.com/supply-chain.

[1] https://www.whitehouse.gov/briefingroom/blog/2021/11/03/improving-and-tracking-supply-chains-link-bylink/#content

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BY GRAHAM GARRISON

Harmonized Services

From pharmacy to supply chain to clinical operations, Yale New Haven Health's Lorraine Lee has expanded her role – and contribution – to her health system's collective goals.

Lorraine Lee has always been drawn to health care. A self-described "math and science geek" in high school, she was fascinated by the inner workings of health care providers, and wanted to build her career around contributing to patient care.

Pharmacy seemed like the best fit, so Lee chose her educational path accordingly, becoming a pharmacist. "I am proud that I am a pharmacist and now have moved on to use these skills to broaden my administrative scope in a large health system."

More than 30 years ago, Lee found a career home at Yale New Haven Health (YNHHS). She's been with the organization ever since. "I love the organizational culture and our mission," she said. "I work with world-renowned experts, and this is constantly stimulating and challenging. Our team members support and care for each other and that makes our difficult work doable and manageable."

Health care is a challenging industry, Lee said, and never more so than the past couple of years, "but I have a passion for it, and it keeps me going."

For her work across all aspects of supply chain, pharmacy and clinical operations, Lee was named The *Journal of Healthcare Contracting*'s Contracting Professional of the Year.

Expansion of scope

So how does an individual go from pharmacist to supply chain and beyond? As Chief Pharmacy Officer, Lee's role was expanded to include Supply Chain in February 2018. Then in January 2021, the scope of her role was expanded again to include Laboratory and Radiology Services.

Photography by Kristin Hynes

Lorraine Lee

"I have always been interested in expanding my scope within health system operations to lead and bring value to other clinical services as I did for pharmacy," she said. "I think that pharmacists have unique training and skills and are well known to be innovative problem solvers and strategic. We are trained as clinicians, but also understand how to manage operations and fiscal stewardship in a complex area like pharmacy. These are qualities that health system leadership requires to successfully navigate our industry. I rely on my background as a pharmacist to drive toward solutions that focus on safe and efficient patient care."

As Senior Vice President for Clinical Operations, Lee has primary responsibility for Supply Chain, Pharmacy, Laboratory and Radiology Services for YNHHS. She reports to the Chief Clinical Officer for the health system, and has an experienced leader over each of her four areas.

"Together with my leaders we ensure that we have a robust strategic plan with short- and long-term goals that enable us to support the overall strategy of the health system," she said.

The definition of clinical operations within a health system is a broad term, Lee noted, that others have termed "essential services" such as supply chain, pharmacy, lab, radiology and others as well. These are the clinical services that care for patients and are part of the health care team. "Many times, we think of nurses and physicians, but the teams that care for patients are so much more,"

she said. "Some other areas include respiratory therapy, physical therapy, rehabilitation, nutrition services and more."

One of the primary goals of her position is to ensure that her team promotes and enhances one of YNHHS's tenets called the "Signature of Care" for all its patients throughout the health system. "No matter where or when a patient accesses the services, the care is the same. I ensure that policies, procedures and guidelines of care are harmonized in the areas I have responsibility for."

The clinical operations leadership teams share strategic objectives to harmonize services across the health system to ensure "Signature of Care" strategies are employed, Lee said. "We review and collaborate on these to ensure we are all working toward the same collective goals. I can highlight that we have collaborated across lab, supply chain and pharmacy services to ensure we have a robust COVID vaccine and COVID testing enterprise to care for our patients and employees. These are complex and acute services that need to ebb and flow with the pandemic surges and the new guidelines that come from state and federal agencies. Our ability to work hand-in-hand on these initiatives make the complexities manageable and we have had great success."

In the future, more collaboration across services like rehabilitation and in-home services that YNHHS can provide patients are a priority. "This again will require all the services under clinical operations to work together," Lee emphasized.

'The world is not the same'

Even before COVID, the way health systems operated was undergoing a tremendous amount of change. Every organization has changed over the last two decades, Lee said. "The world is not the same and we all need to move with the current times."

Health care has never had so much innovation in technology, medication therapies and advanced knowledge through research and the quest to cure disease than in the past 20 years. Health care delivery has changed too, "we do so much more in the outpatient areas and in the home-to-care for patients," Lee said. "This is an imperative that technology, medical supplies and medications are changing to meet these needs. It is fascinating to see how much more advanced we are today, looking forward to seeing the next two decades to continue to cure disease."

When the first peak of the pandemic hit, it hit especially hard in New England and New York in early 2020. "We had challenges on challenges," Lee said.

She and her team were searching for critical supplies like PPE and spent most of their energy and attention to acquire the right PPE to protect their colleagues on the front lines as they battled the pandemic. They had a brief time to recover during the summer 2020, and even though there were COVID peaks in fall 2020 and winter 2021, "we were able to manage."

However, the basic functioning of the national supply chain never recovered. Now, health systems are facing more shortages and backorders than ever before. "We may have enough PPE, but we are short on critical supplies for ICU care, perioperative care and basic bedside care for patients," Lee said. "We are out of peripheral and central venous access supplies, and then we have to scramble daily to substitute to another product. This is an enormous task and not easy."

The pandemic was a "never" event that happened and has changed the way supply chain professionals strategize, anticipate, and manage events. Moving forward, Lee said her organization is focused on sustainability as a tenet. Sustainability for health care can look like many different things, but in Lee's areas

Clinicians and the supply chain

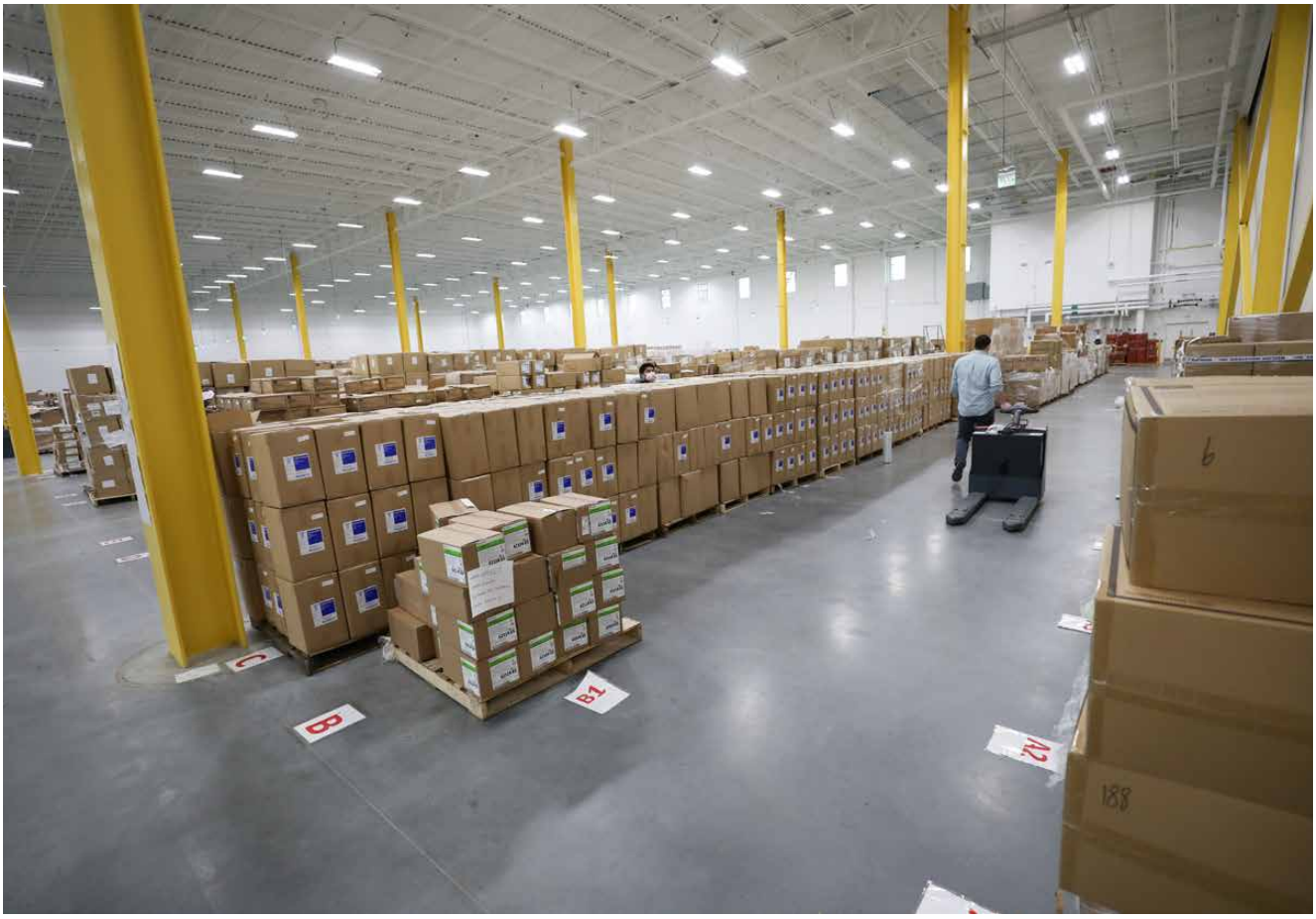
When it comes to bringing clinicians into supply chain and operations discussions, Lee said there are more benefits than pitfalls. "Clinicians are the best at understanding what is the right care for patients to manage conditions and disease, to ensure diagnostic procedures and other therapies are appropriate," she said. "So, when clinicians are at the table, we make the best decisions we can for our patients. The responsibility of supply chain is to impart their expertise and tee up the clinical importance and data for robust value analysis for medical supplies and services. The teams need to understand the risks and benefits of each supply decision with a patient lens towards safety, quality and fiscal stewardship."

The pitfalls to avoid are when there are assumptions made by team members that decisions are made based on cost alone and the clinicians are not at the table to understand and contribute to the analysis.

of responsibility it means that they must evaluate their vendor management and ensure their supply chain is dependable. They must anticipate needs and volumes of supplies that mimic what they experienced during the pandemic – and then some. They also must understand where raw materials are made, where supplies are manufactured and what are the vendor contingencies to support their operations.

"We have to balance the stockpile methodology with being good financial stewards and we have to constantly stay abreast of issues to attempt to be more proactive and not reactive."

Lee said the education of bedside clinicians when there is a constant change in supplies is a challenge, but it



is one she and her team have prepared for. "We have a whole team of nurses and medical directors dedicated to supply chain that manage these shortages, find appropriate substitutions and then ensure the front-line education to utilize the new supply safely," she said. "You only need to turn on the nightly news to understand that, nationally, supply chain still needs vast improvement and we need to ensure that, nationally, we can have sustainability in the health care supplies that we rely on. This is still a very challenging time. We constantly navigate the current waters and sometimes we swim and sometimes we tread, but we always strive to move forward." ■

About Yale New Haven Health

Yale New Haven Health (YNHHS), the largest and most comprehensive healthcare system in Connecticut, is recognized for advanced clinical care, quality, service, cost effectiveness and commitment to improving the health status of the communities it serves. YNHHS includes five hospitals – Bridgeport, Greenwich, Lawrence + Memorial, Westerly and Yale New Haven hospitals, several specialty networks and Northeast Medical Group, a non-profit medical foundation with several hundred community-based and hospital-employed physicians. YNHHS is affiliated with Yale University and YSM's clinical physician practice, Yale Medicine, which is the largest academic multi-specialty practice in New England. YNHHS and Yale partner on clinical care, education and research, bringing the latest discoveries, technology and therapies to patients. www.ynhhs.org.

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Kristy Warren: Spotlight on a Nurse Hero

Kristy is now a part of the Encompass team as Director of Clinical Resources. When I asked her what made her decide to come on board she had a very eloquent answer. She realized how much positive change she could affect via touching thousands through our nurse education programs, clinical product evaluation trials, and innovative product development. Kristy embodies the definition of grit and grace – she truly is a nurse hero.


Kristy Warren

What motivated you to become a nurse?

Kristy Warren: It all starts when I was 9 years old. I was the only child in an adult hospital with complex appendix issues that required multiple surgeries. Even at that young age, I developed a great relationship with the nurses and admired their empathy. Their trust and compassion sparked my passion for healthcare. I also have family in the nursing field including my Grandmother.

What is the best part of being a nurse?

Warren: As an ER Nurse, I was able to tap into my two key passions: healthcare and investigation. I have always loved both and was torn on what to study – law enforcement/investigative work and healthcare. ER nursing requires a complex skillset: the ability to decipher clues to figure out diagnoses and the compassion and empathy to ensure good care. Bringing them together helped me make a difference for those who entered my ER. Further in my career, I found that continuous improvement in making healthcare better for all, continuous education, and being a part of small steps of change are at the top of the list for being the best part of being a nurse.

What is the most challenging part of being a nurse?

Warren: One word: Stress. As an ER nurse, you learn quickly to develop resilience. You also learn to trust your colleagues, your team. You learn to understand each other, keep each other's spirits up. You cry and laugh together. You save people together. In nursing, there are physical stressors as well as mental stressors. It is important to take care of yourself mentally and physically to afford the opportunity to care for others safely and effectively. Keeping this in mind, I was able to care for others in very high-stress environments for an extended period of my career.

How do you stay motivated and positive?

Warren: Of course, my family is central to staying positive. My two daughters mean the world to me. So does my team. I could not do any of this without them. From a motivation perspective, central to my growth and forward movement was taking on new challenges. I went back to school and earned my Masters in Nurse Education, following my passion for continuous education and growing a new generation of nurses. Over the course of my career, I was tapped for many different leadership positions of increasing responsibility including Charge Nurse, Nurse Educator for Critical Care, and Leading all Educators in my facility. I then combined my passion for education and leadership and eventually went on to lead a critical care team and help turn one of our units around from the poorest metrics to the best metrics. As a nurse leader, I strived to ensure staff was treated fairly and equally and focused on strengths, learning, and growth opportunities for all.

What can we do to be supportive of you and all healthcare workers during this pandemic?

Warren: While the last three years have taken their toll in so many ways, I've also seen some positive outcomes. So many have developed new skills and ways to stay resilient. Somehow through all the loss, our front-line workers have stayed resilient and continue on. We need to thank all those who deal with this every day.

If there was one wish you could grant, what would it be?

Warren: This one is simple. The gift of time. There are no guaranteed tomorrows and the pandemic has shown us that.

Is there anything you'd like to share about your experience being a nurse?

Warren: I guess I would want everyone to know that small steps can make a big difference. Small changes make big impacts. Don't be afraid to stretch, to dream, and to go for it.

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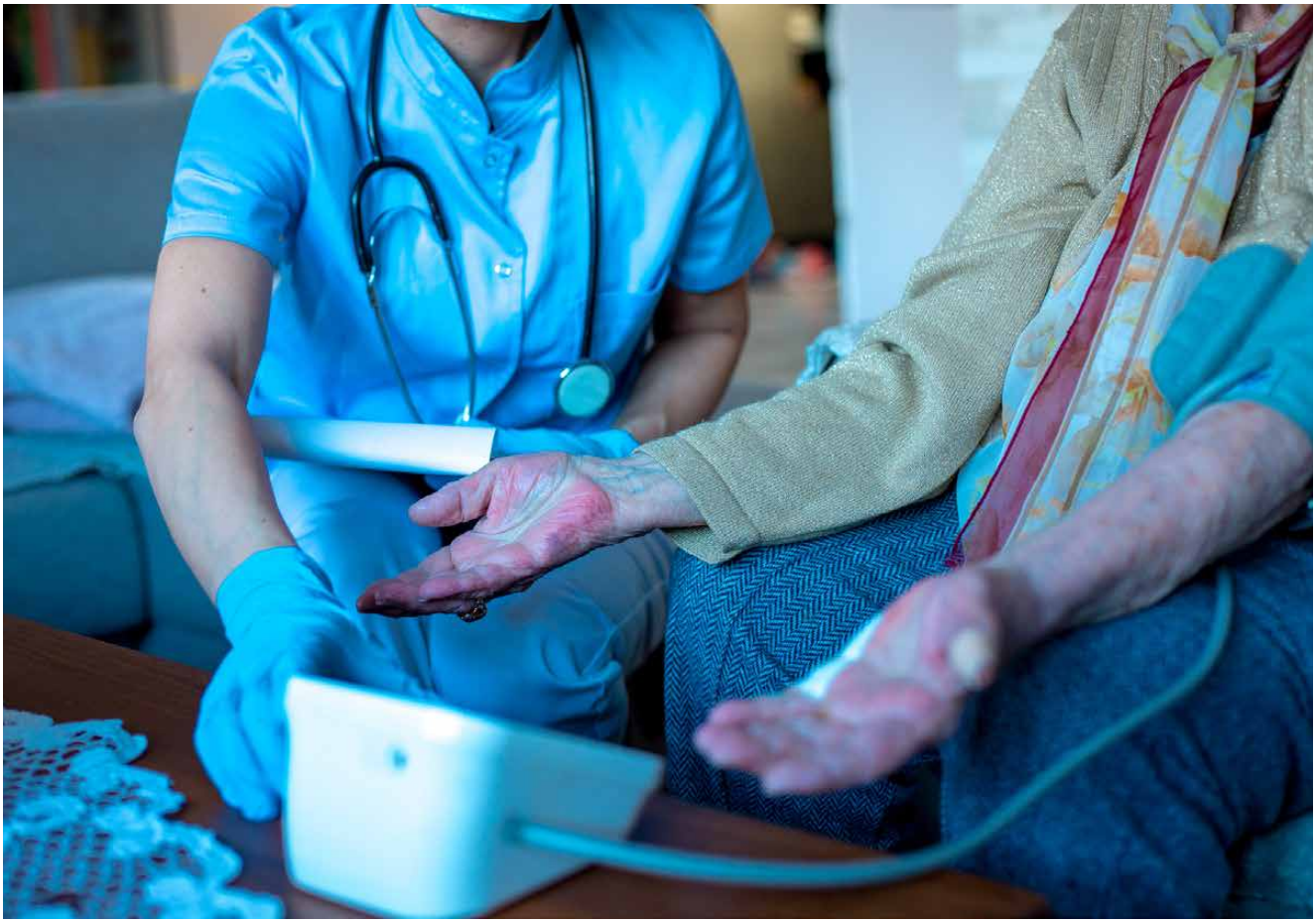
BY GRAHAM GARRISON

Hospital @ Home

More and more providers are turning to acute care in the home. But how effective, and safe, is the new model?



When Bruce Leff, MD, is in his office space at Johns Hopkins seeing an older adult who is acutely ill, he thinks very hard on whether hospital admission is the best choice. "I know I can take care of the heart failure, or the pneumonia, or anything else," he said, "but will they end up worse for wear, just by virtue of having been in the hospital?"

It's a question hospitals and health systems have been grappling with for decades, including Johns Hopkins. And it's one that came front and center during the pandemic as providers, strained by volume and workforce shortages shifted to new models of care.

Researchers started to think about the ability to provide acute hospital-level care in the home, instead of the bricks and mortar hospital in the mid-90s. Questions they asked themselves included: Who should be treated in Hospital At Home? What conditions? How do you choose the right patients?

"You want patients who absolutely meet threshold requirements for an inpatient hospital stay, but they're not so sick that they need an ICU or have a high risk of deteriorating during the hospital stay, so we developed those kinds of criteria," said Dr. Leff, professor of medicine and the director of the Center for Transformative Geriatric Research at the Johns Hopkins University School of Medicine.

Johns Hopkins conducted early studies on whether patients would actually sign up for this kind of care, and it seemed that they would. Anecdotally, researchers knew that many older adults refuse to go to the hospital if they can avoid it.

"There's a very robust literature to suggest that the hospital is not always the most hospitable environment for older adults," Dr. Leff said. Older adults can develop confusional states in the hospital, like deliria. It can cause long-term cognitive outcomes. "They develop more functional impairments, because it's hard for them to get out of bed, and then they end up in a nursing home. They fall out of bed, they get nosocomial infections, all of that."

Researchers at Johns Hopkins did some early clinical trials of Hospital At Home, and reported that patients did well with clinical, economic and positive patient experience outcomes. Back then, there was no fee for service payment for Hospital At Home. Johns Hopkins tried unsuccessfully to get a payment waiver from CMS to pay for Hospital At Home in fee-for-service Medicare in the mid-late 90s, but was unsuccessful. So, they pursued larger studies with Medicare Advantage plans and the VA. Within 2014, a Center for Medicare and Medicaid Innovation demonstration of Hospital At Home was conducted at Mount Sinai in New York. "Again and again, it proved out all the basic hypotheses we had about Hospital At Home," Dr. Leff said. People opted in at high rates, there was better patient and caregiver experiences, clinical outcomes were excellent, costs were lower, and in many cases better than what they would be at the hospital.

Over the last few years, several commercial entities have entered into the Hospital At Home space. Dr. Leff thinks that has helped accelerate adoption quite a bit. "I think it's fair to say that it is the most studied health service delivery innovation over decades. Depending on how you count, in the U.S. and the international literature, a lot has been done on this … and the theme and the results are very consistent across all those studies."

"I think it's fair to say that it is the most studied health service delivery innovation over decades. Depending on how you count, in the U.S. and the international literature, a lot has been done on this … and the theme and the results are very consistent across all those studies."

Hospital At Home amid the pandemic

COVID has only accelerated its adoption. In March 2020, CMS announced the Hospitals Without Walls program, which provided broad regulatory flexibility that allowed hospitals to provide services in locations beyond their existing walls. In November 2020, CMS expanded on it by launching the Acute Hospital Care At Home program, providing eligible hospitals with "unprecedented" regulatory flexibilities to treat eligible patients in their homes.

"We're at a new level of crisis response with COVID-19 and CMS is leveraging the latest innovations and technology to help health care systems that are facing significant challenges to increase their capacity to make sure patients get the care they need," said CMS Administrator Seema Verma. "With new areas across the country experiencing significant challenges to the capacity of their health care systems, our job is to make sure that CMS regulations are not standing in the way of patient care for COVID-19 and beyond."

The program was developed to support models of at-home hospital care throughout the country that have seen prior success in several leading hospital institutions and networks, and reported in academic journals, including a major study funded by a Healthcare Innovation Award from the Center for Medicare and Medicaid Innovation (CMMI).

"The development of this program was informed by extensive consultation with both academic and private sector industry leaders to ensure appropriate safeguards are in place to protect patients, and at no point will patient safety be compromised," CMS said in a release. "CMS believes that treatment for more than 60 different acute conditions, such as asthma, congestive heart failure, pneumonia and chronic obstructive pulmonary disease (COPD) care, can be treated appropriately and safely in home settings with proper monitoring and treatment protocols."

Participating hospitals are required to have appropriate screening protocols before care at home begins to assess

both medical and non-medical factors, including working utilities, assessment of physical barriers and screenings for domestic violence concerns. Beneficiaries will only be admitted from emergency departments and inpatient hospital beds, and an in-person physician evaluation is required prior to starting care at home. A registered nurse will evaluate each patient once daily either in person or remotely, and two in-person visits will occur daily by either registered nurses or mobile integrated health paramedics, based on the patient's nursing plan and hospital policies.

CMS said it anticipates patients may value the ability to spend time with family and caregivers at home without the visitation restrictions that exist in traditional hospital settings. Additionally, patients and their families not diagnosed with COVID-19 may prefer to receive care in their homes if local hospitals are seeing a larger number of patients with COVID-19. "It is the patient's choice to receive these services in the home or the traditional hospital setting and patients who do not wish to receive them in the home will not be required to."

Factors to consider

Mark Larson, principal, Sg2, has been studying the Hospital At Home model closely for several years. The programs he's observed mainly treat medical conditions including congestive heart failure, COPD, and other non-surgical type diagnoses that can be treated safely in the home environment.

"You also have to think about, would the patient be able to have Hospital At Home in their home environment? Is there support there from a family member or a spouse? Because the home environment needs to be safe. So there's the clinical side of it and then there's the socioeconomic side of it – making sure the right support in the household exists."

Typically, Hospital At Home programs are in larger geographical areas, urban or suburban areas. There aren't many programs in rural areas, due to the logistics of delivering care in such a remote location, Larson said. It's more time-consuming and not as efficient. "The numbers piece definitely comes into play."

Larson said overall, clinical outcomes from Hospital At Home programs have been pretty good. "We've seen lower length of stays in some of the early pilots. We've also seen lower readmission rates, as well as lower skilled nursing utilization."

If you have the same providers, you have the same nurses delivering care post-discharge, thus the chances of having issues with care transitions are lower. "Really it's the same care team taking care of the patient during the acute care episode and post-acute care."

Patients seem to like the program. Patient satisfaction scores for organizations like Mount Sinai in New York and others have been pretty high, Larson said. It's no wonder – hospitals represent a changed environment for the patient. Alarms may go off in the middle of the night, nurses and doctors are coming in and out of the room at all hours of the day. "It can be very disruptive, especially for the elderly population."

"You don't start with a big program. Obviously you start the program slow, and you build upon your success. Showing good results demonstrates that this is a good avenue for the provider."

Questions providers must ask

Still, the Hospital At Home model is not for everyone, Larson cautions. "You have to be a pretty good-sized hospital or health system, and you have to have adequate volume in your marketplace, just as an entry point," he said.

Larson offered the following as pieces that providers must consider:

Capability

Do you have the capabilities to deliver Hospital At Home? "Of course providers are really good at delivering care in the hospital," Larson said. "They're used to doing that. They've been doing it for years, serving their community well. But when you go out into the Hospital At Home environment, it's a whole different ballgame."

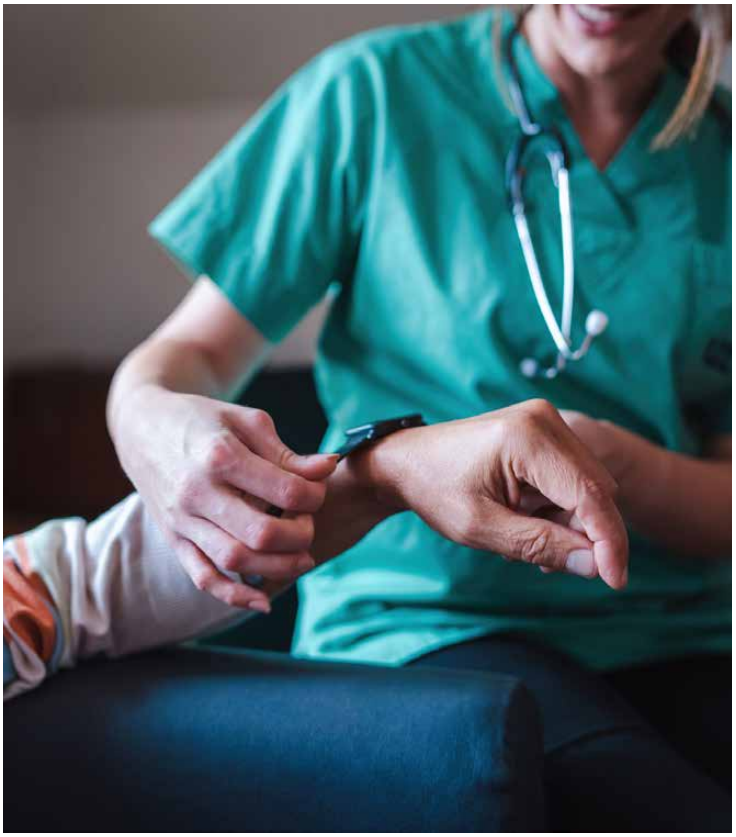
First and foremost, you need to have foundational home care nursing services. That's key, because nurses are a core element to your service, Larson said. "The organizations who have elevated and delivered Hospital At Home and rapidly

been able to scale it up have had a really strong home nursing care program."

Second, providers must have physicians and nurse practitioners that can support the program. Typically, there are two different models, Larson said. In one model, providers actually go physically to the home as physicians and nurse practitioners when the patient needs it. There is also the virtual model, which is more scalable. When the home care nurse is providing hospital care in the home, they may call the physician or the nurse practitioner and have a visit with them on the status of the patient, the same as a rounding physician would do in a hospital. "You really need to have the physicians and nurse practitioners on board," Larson said.

For either model, providers must demonstrate the safety and value of the program to a patient, to the hospitalists in the hospital and the emergency department physicians and leadership as well. "You don't start with a big program," Larson said. "Obviously you start the program slow, and you build upon your success." Showing good results demonstrates that this is a good avenue for the provider.

"This is not a small undertaking," Larson said. "Providers need to become very strong administratively and logistically. As some health systems deliver more care in the home, they will need to become very logistically strong, whether through a partner or developing their own technology, to be able to say, OK, there's an admission. We need this, this, and this going into the home. Here's the timing, here's the schedule. We need the nurses on site right away, all these things need to be orchestrated. And without that logistical capability, it becomes very challenging."



Safety first

How safe are the Hospital At Home programs being implemented across the country? Even in the pre-remote patient monitoring, there were many Hospital At Home studies conducted, and safety was well-demonstrated in those studies, said Dr. Leff.

"And now, with the advent of the technology over the last 10 years, you can do much more monitoring at home than you could do previously." Dr. Leff said.

Choosing the right patients for the program is one critical component. The providers all have a way of selecting patients in a systematic way, and they're choosing patients that match what their programs can do, "so safety really works out," Dr. Leff said. "People do well, and they're getting multiple visits per day from various providers in the program."

"I think the other thing to think about is that people have the notion that just because in the hospital, they're being 'monitored,' but that is not always entirely accurate." Most providers are using remote patient monitoring now, "so the programs can keep tabs on vital signs whenever they want or continuously."

Cost

Providers need to be able to look at services and understand whether or not they have the ability to provide care more cost effectively in the home. "Cost is certainly the biggest piece," Larson said. "From a financial perspective the biggest opportunity is when you don't look at just the acute care visit, but you're looking across the episode of care. In other words, the hospital piece is important, the acute care piece, but there's also that 30-day post-discharge piece, where there might be skilled nursing care or other care post-discharge, or potentially a readmission."

Capacity

Does the hospital or health system have capacity constraints? Larson said a lot of the academics, tertiary quaternary providers gravitated to Hospital At Home because they were at capacity during COVID, and some even before COVID. They saw Hospital At Home as an opportunity to potentially decant patients from the acute care environment and have them receive care in the home.

"You want patients who absolutely meet threshold requirements for an inpatient hospital stay, but they're not so sick that they need an ICU or have a high risk of deteriorating during the hospital stay, so we developed those kinds of criteria."

Organizations that have been successful often contract with Medicare Advantage payers, and they'll go at-risk on that the full 30-day episode. "The numbers we've seen are you can save close to $1,000 per patient if you look at that entire episode," Larson said. "If you only look at the acute care piece, the savings isn't as significant – it can be $200 to $400 in savings. So I think that's a key financial piece."

Another important piece is that often when you're negotiating with payers with Hospital At Home, they're looking for a discount off of what they typically would pay you for acute care in the hospital. "So you have to factor that discount into it, and obviously negotiate that with the payers when you're developing a program," Larson said. "And that's a big deal. Contracting for Hospital At Home is a big portion of the hard work that has to be done."

"Hospital At Home patients are typically lower acuity, and lower payment. The contribution margin for these patients is also much lower than the typical average population served," Larson said. "So if you have a patient that goes into the Hospital At Home, receives care in the home, you're potentially swapping a lower contribution margin patient out to Hospital At Home with the opportunity to bring a higher contribution margin patient in that needs higher acuity care."

Larson said there are two points to this strategy to consider. First, you're serving a population that you're more set up to manage – higher acuity care – especially in a larger tertiary care center. Second, you're able to bring higher contribution margin patients into that environment. "For hospitals that are thinking they might have to build a new tower, maybe this is an opportunity to reduce the number of future beds built."

The future of medicine

Larson predicts that every market is going to play out a little bit differently, but as far as care being delivered in the home, "we're already seeing a pretty significant shift."

The organizations that have the higher need are going to move faster. "So when you think about it, where is the shift occurring?" Larson asks. "It's maybe less capital investment, brick and mortar investment, but more investment in operations, logistics, and care that providers can deliver in the home. I think something else you need to consider is, can you recruit and retain nurses who are willing to provide care in the home? That's not for every nurse. Some nurses are much more comfortable going into hospitals and ambulatory sites to deliver care."

What's ultimately driving the shift is the technology to enable more remote monitoring, and consumers, who would prefer to receive care outside the traditional four walls of a hospital. "We really do expect more entrepreneurial companies to deliver things like home diagnostics and making it much more seamless to the process," Larson said. "Right now it's still a little clunky, but it's going to get there. It's going to be more about making it convenient for the consumer and more cost effective for the health system as well, hopefully in the future." ■

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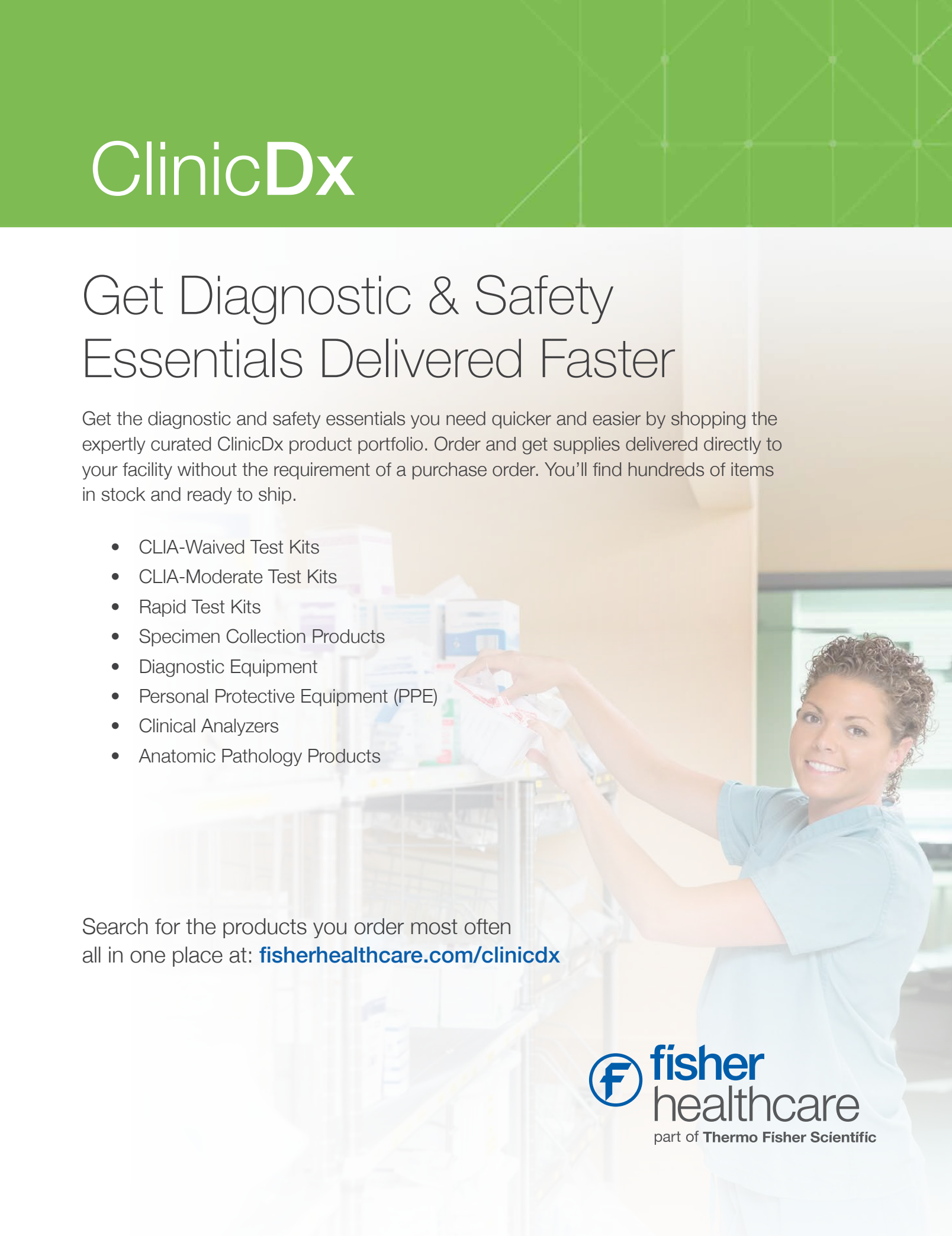

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BY TOM CAMPANELLA

We Can No Longer Wait

Why Medicare/Medicaid and private payers need to expedite the transition to "real" risk/value-based payment methodologies.

A key lesson learned from history is that a healthcare system is shaped by what you pay for and how you pay for it. A very simplistic concept, but it is so true! We are experiencing a medical arms race which is not a surprise, since historically we have had a fee-for-service payment system for providers based on "the more you do, the more you make."

Historically, the "what you pay for" has been focused on the "after event," that is, after you are sick, after you have the heart attack, after you have arrived in the emergency room, after you have been identified with stage 4 cancer. I think you get the point.

Historically, the "how you pay for it" has been fee-for-service based, that is, the more you do the more you make (self-interest). Is the picture becoming clearer?

Finally, adding a finishing touch to this sickly historical scenario, the purchasing decision-maker, the consumer, is unaware of the cost and quality differences between healthcare providers and services rendered (asymmetric information) and in most cases, doesn't even care because someone else is paying the majority of the bill (employer, Medicare, Medicaid) (moral hazard).

As you can see, there is no magic in this story line, just painful reality.

So, what does all the above lead to?

We need to first start with the "what you pay for" and "how you pay for it."

The "what you pay for" needs to focus on keeping people healthy and the "how you pay for it" needs to provide rewards, along with accountability, related to services provided in keeping people healthy as well as in the provision of value-based care.

How you pay for it: Why must there be both risk and rewards embedded in a payment system?

Some form of financial accountability and risk needs to be incorporated in our payment systems or the focus will only be on the cheese (money), and there would be no real incentive to address the long-standing structural issues on the cost side of the equation.

Fee-for-service and value-based or some form of capitation yield a different array of incentives. As noted above, fee-for-service incents over-utilization which not only adversely affects healthcare costs, but also quality outcomes. Value-based care models change financial incentives to focus on value by rewarding better outcomes and lower spending.

Capitation is the Cadillac of payment methodologies since its primary financial incentive is to keep people healthy. I believe that capitation in some forms (or premium sharing in joint venture with payers) will be a key catalyst in shaping the winners in this new world of healthcare. These risk-based payment systems would then foster an environment of health and prevention as a key to profitability for providers vs. the current system that incents increased utilization of resources.

Capitation will also enhance the role of primary care in our society. Primary care is the centerpiece in a capitated environment. Since the financial success of an organization will result from keeping people healthy vs. that of our historical sick-care system, the primary care provider will become the captain of the ship, which is what they always should have been.

Those providers that embrace risk/value-based payment methodologies such as capitation will take a giant step in their evolution to becoming a value-based organization. The quickest and best way to break down the silos that have existed forever in healthcare is to embrace payment systems that reward providers for doing so.

Quality measures? It needs to be all about outcomes

If you want a healthcare system that is based on consistent quality, you need to pay for it, but the focus should be on outcomes, not a myriad of quality matrixes that focus on processes. The measures for value-based programs should focus on patient-centered outcomes or processes that only are tightly linked to patient-centered outcomes. Patients do not care that you followed all the appropriate processes, they care about a quality outcome. Also, excessive, and unnecessary quality measures not only add to the administrative cost burdens of providers, they also divert their attention from quality outcomes.

If you want a healthcare system that is based on consistent quality, you need to pay for it, but the focus should be on outcomes, not a myriad of quality matrixes that focus on processes.

There has been some push back from providers when quality is focused on outcomes since a key factor in a health outcome is also patient engagement. While I agree with this assessment,

we still need to focus on outcomes. In focusing on outcomes, providers will need to address patient engagement more aggressively, which is usually not the case. Also, the effective utilization of telehealth could play a key role in enhanced patient engagement and education.

Payment policies' impact on the health of our communities

One key complicating factor that negatively impacts a community's ability to address social determinants and overall population health in a proactive manner is the fact that some of these key stakeholders' (hospitals, physicians, etc.) financial success and, in turn, focus is linked to our current "sick-care" system which is fueled by a "fee-for-service" payment methodology which does not pay for keeping people healthy.

If we truly want to transition from a "sick-care" system to a "health-care" system we need to embrace payment methodologies that reward providers to keep people healthy. This transition will also require hospitals to look outside their walls and focus in collaborative ways with other stakeholders on a healthier community

Also, as noted in a blog titled, "The social determinants of health, can we reach for the stars," capitation and value-based purchasing also play a key role in addressing the social determinants of health. The tie-in between value-based purchasing and capitation in some form provides the appropriate incentives to ensure that social determinants of health are being addressed in a cost-effective manner and quality services are being delivered.

The focus on population health and social determinants will further hasten the evolution of the healthcare sector to look beyond the walls of the hospital and into the community. This will also impact "Community Health Benefits" that are tied to the tax-exempt status of hospitals that are currently mainly focused within the walls of the hospitals (Medicaid short-falls in revenue, etc.). There will be increased demand for these resources to be redirected outside the walls of the hospital as part of a comprehensive strategy to achieve a healthier community.

The quickest and best way to break down the silos that have existed forever in healthcare is to embrace payment systems that reward providers for doing so.

Adding employers to the mix with both risk/value-based payment methodologies, value-based benefit designs and increased utilization of cost and quality transparency tools, provides the necessary ingredients for a healthier community for all.

We need to unleash the power of "self-interest" through payment systems that are risk/value-based. If providers are predominately paid under a fee-for-service system, we will continue to have a «sick-care» system.

Payers, especially Medicare, play a key role in transitioning our healthcare system to be value-based

One could point the finger at providers of care for the high cost of healthcare in the U.S. and for inconsistent quality, but the real culprit historically has been the healthcare payers, and specifically, the largest payer, the 800-pound gorilla – Medicare.

Medicare payment policies and regulations also influence payers that focus on the non-Medicare population since they often follow the lead of our largest payer.

As we learned from health economics, providers of care are rational beings and, like decision-makers in other industries outside of healthcare, they will make decisions from a self-interest perspective that is best for their organizations. This applies to both for-profit and non-profit entities, since if there is "no margin, there is no mission."

If we want to evolve our healthcare system to be more value-based we need to start with substantial changes to Medicare's payment policies and regulations. While there has been much rhetoric relating to Medicare (as well as commercial payers) transforming its payment system to be value-based, the sad fact is that it has been mostly rhetorical.

We need to get beyond pilot programs and implement real payment reform to create real financial incentives for providers to transform their organizations and services to be value-based.

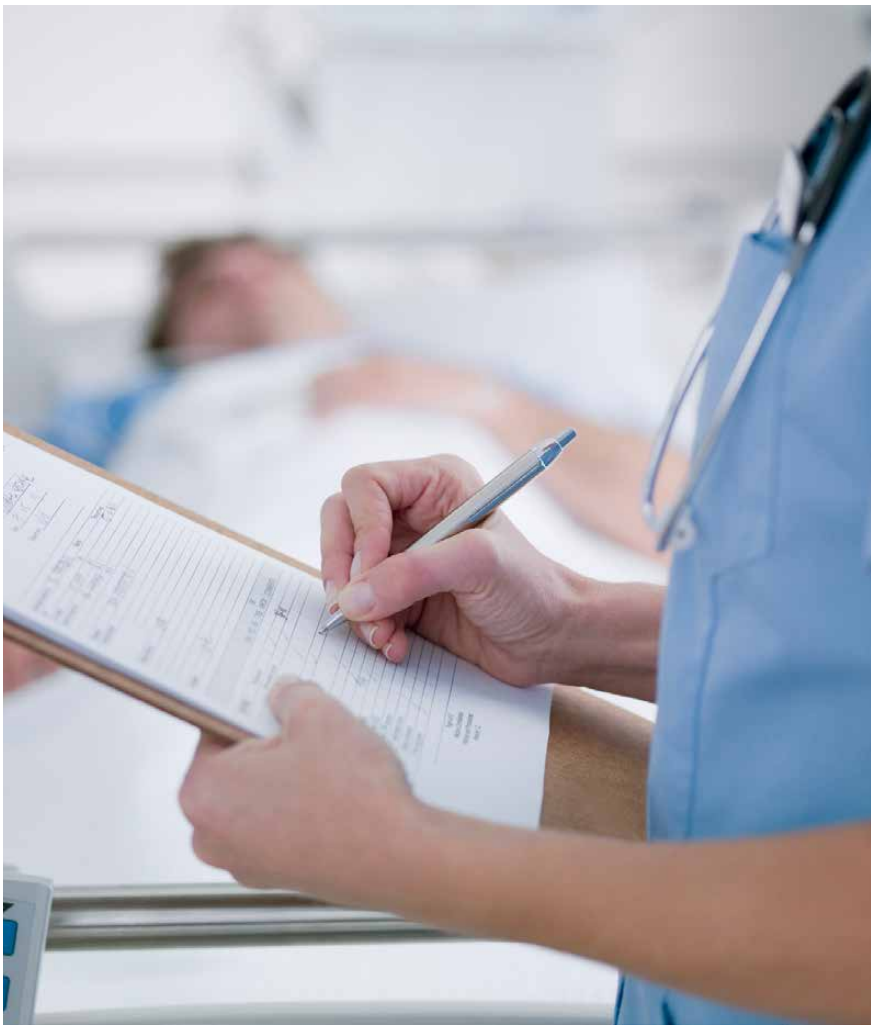
The power of "self-interest" takes over when Medicare (through Medicare Advantage) and Medicaid (through Medicaid Managed Care) primarily reimburse providers of care with a value-based payment methodology with both upside and

downside risk (ideally capitation) which redirects the providers' focus to the overall health of the patient and the community.

As the Medicare Payment Advisory Commission (MedPAC) has stated for years in different ways, historically, Medicare payment policies and regulations have been a major catalyst to our high healthcare costs.

The following statement is from MedPAC's June 2020 report to Congress: *The Commission* contends that unless changes are made to how Medicare pays for services, the cost of the Medicare program will become unsustainable for the country, which could necessitate dramatic changes to the Medicare program and/or its financing. FFS contains inherent incentives for the delivery system to provide more services and thus receive more payments. The FFS system increases Medicare costs, based on higher than necessary use of services, and in some instances, the provision of care at higher cost sites of service.

In June of 2021, MedPAC also had a specific recommendation for The Center for Medicare & Medicaid Innovation (CMMI). Per MedPAC: Most of the Alternative Payment Models (APMs) to date layer bonuses and other payments on top of traditional FFS payment systems, many of which have financial incentives to increase the volume of services delivered. Many APMs attempt to counter these FFS incentives by rewarding providers who reduce total spending per beneficiary while maintaining quality. But because FFS systems are used to pay for services in many of these APMs and any performance payments earned are usually paid several years after any savings are generated, those models can send mixed signals to APM participants.



Our sick-care system represents approximately 17% of our gross domestic product. What one group may call healthcare expenses another group may call healthcare revenue.

Fee-for-service payment also encourages providers to pursue the technologies that result in higher volume and payment regardless of value. This can bolster the "arms race" mentality that providers must pursue the latest technologies to remain financially successful relative to their peers.

The message from MedPAC is clear:

- Medicare needs to move away as soon as possible from its reliance on the fee-for-service payment system.
- Value-based reimbursement models to date that are utilized by both Medicare and private plans have been

mostly ineffective since a large percentage of them are layered over a fee-for-service payment system which incents over utilization.

- Risk-based payment methodologies, such as capitation and bundled payments, will incent the cost-effective delivery of healthcare services and, as in the case of capitation, reward providers for keeping members healthy.

- If providers are not paid for value and there is no financial risk linked to their decisions, they are less likely to make value-based purchasing decisions as it relates to their supply chain.

Per MedPAC: Research also shows that provider costs are not immutable, they vary according to how much pressure is applied through payment rates. We find that providers under cost pressure have lower costs than those under less pressure, and Commission analysis demonstrates that providers can provide high-quality care even while maintaining lower costs relative to their peers.

Finally, hospital-based Accountable Care Organizations (ACOs) in theory have the potential to positively impact both cost and quality because of the integration of providers into a seamless network. Sadly, these value goals have in most cases not been achieved, mainly because the appropriate payment incentives were not in place. Hospital-based Accountable Care Organizations (ACOs) need to embrace downside risk. In fact, the acceptance of downside risk by ACOs should no longer be voluntary on the part of Medicare. Downside risk, while initially painful, will force efficiencies and collaborations that would not have occurred otherwise. These efficiencies and collaborations will allow both the hospital and the ACO to obtain long-term success.

Our sick-care system represents approximately 17% of our gross domestic product. What one group may call healthcare expenses another group may call healthcare revenue. Our sick-care system is well entrenched and has a significant impact on our economy (jobs, etc.). As in any change that impacts the status quo, this evolution from a sick-care system to a healthcare system will not be easy. There will be major resistance.

We need to embrace a risk/value-based payment system which, during the short-term, will be challenging for health systems that historically have utilized the "fee-for-service" (the more you do the more you make) as their life-line.

Large teaching hospitals do have a potential competitive advantage in a risk/value-based world, especially related to a capitated environment. The combination of their intellectual capital and technology allows them to better assess the needs of the patient as well as be proactive in keeping people healthy, which would make them a winner in this environment. Also, by embracing capitation, large hospital systems have the ability to better compete in the marketplace since they will take ownership of Medicare's (or other payers') members' health in all settings of care. This is why the big systems need to embrace risk as well as collaborative relationships with payers in other ways (premium sharing, etc.). ■

Tom Campanella

Tom Campanella is the Healthcare Executive in Residence at Baldwin Wallace University. Backed by more than 35 years of experience in the industry – particularly the health insurance, physician and hospital sectors – he's focused on strategic advising and community outreach. Follow Tom's articles on LinkedIn for his latest weekly coverage of the healthcare industry.

BY JODY DOBSON

Drone Deliveries

How health systems can plan for adding drone deliveries to the supply chain's capabilities.

"Drone technology has the potential to significantly improve the care we can deliver to our patients … while seamlessly and directly connecting our facilities in a unique way." – Dr. Stuart Ginn, Commercial Airline Pilot, ENT Surgeon, pioneer of an innovative drone program at Raleigh, North Carolina-based WakeMed Health.[1]

The use of UAS (Unmanned Aviation Systems) for commercial medical transport in the United States is on the verge of taking off. Today in the United States, Matternet is already working with health systems to operate reliable drone networks for critical medical deliveries.

As supply chain executives build or expand their distribution brick-and-mortar infrastructure, what do they need to take into consideration to accommodate drone deliveries? Medical deliveries by drones will typically fall into two categories:

1. Intra-campus and inter-facility movement of critical medical supplies within the health system's network. This could include blood samples flown from free-standing Emergency Rooms to a centralized laboratory to facilitate faster lab test results for patients. Today, drones are delivering COVID-19 vaccines from a central hospital pharmacy to an off-site vaccine administration site at Wake Forest Baptist Health.[2]
2. Re-supply and redistribution from external suppliers. Health systems will receive commercial drone shipments from vendors and distributors to their distribution centers or directly to the point of patient care.

In this scenario, a regional manufacturer of site-specific tissue called Extracellular Matrices (ECMs) will use drones to provide a new type of "Just in Time" delivery ... directly to an off-site Ambulatory Surgery Center. These patient specific deliveries will allow better treatment customization, which will improve patient outcomes. Health systems will have less money tied up in on-hand surgical inventory and worries about product expiration dates will be reduced.

When Bill Moir, Vice President of Supply Chain at Michigan-based Henry Ford Health System, considered the construction of his new distribution center, he took into account deliveries via drone and purposefully incorporated flexible infrastructure. "While there's a lot we don't know yet regarding the facilities required to land and deploy drones at scale, I was able to make some general assumptions," he said.

First, Moir made sure that one of his new loading docks had "drive up" access, instead of the normal loading dock, which can be 4 to 5 feet off the ground. The paved ramp, which is located at the end of the building, will allow drones to be brought into the building on rolling carts.

Moir considered the human element when thinking about how drone deliveries will be handled by his supply chain team. He has the ability to use some flexible space right inside the drive-up ramp for a separate drone management office or as a hangar for afterhours drone storage. He made sure there is adequate power and internet capabilities wired to that end of the building for the charging and connectivity drones require.

Planning for drone deliveries

The following are additional ways that health system supply chain executives can plan the infrastructure that will be necessary to accommodate drone deliveries in the future:

Connectivity and Communication. Drones use cellular service, satellite communications and WIFI. Landing spots between building or around tall structures are not ideal because cell service might be intermittent in these locations.

Power. Drone batteries will need to be recharged between flights. Will you have the power and space to charge multiple batteries at once?

Operational process, throughput and connectivity. How will the drone deliveries be integrated into your established receiving and tracking processes? How will you track drone deliveries made directly to your care sites, labs and pharmacies?

Security and storage. Health system distribution centers will need secure after-hours storage for drones, which the health system may not own. Security will include keeping track of back up drones, spare batteries, landing infrastructure and spare parts. What if drone deliveries are required 24/7?

Work area for maintenance. Drones are considered commercial aircraft and have scheduled maintenance and safety checks that must occur at regular intervals. Plan to have a well-lit work bench area with space to disassemble and maintain drones.

Sound mitigation. Plan to minimize the noise of drone propellers over residential areas or near patient rooms. Fortuitously, Moir's new distribution center at Henry Ford Health is located in an industrial area, mitigating the impact of drone noise on his neighbors.

Weather. Drones need to be sheltered from high winds, lightening and severe weather. This makes Moir's ability to roll drones into his distribution center at Henry Ford Health a good idea.

Drones are considered commercial aircraft and have scheduled maintenance and safety checks that must occur at regular intervals. Plan to have a well-lit work bench area with space to disassemble and maintain drones.

Supply chain executives should consider practical steps they can take today to anticipate a future that includes drone deliveries at scale. This is an exciting and dynamic time, as health systems discover more ways to use drones to improve patient care and drive operational efficiencies. ■

Jody Dobson is Head Healthcare U.S. for Matternet, a company focused on urban drone utilization for healthcare. For more information, contact Jody at jody.dobson@Matternet.us, or visit mttr.net.

[1] www.wraltechwire.com/2019/10/02/surgeon-pilot-wakemed-innovations-director-sees-bright-future-for-drones-in-health-care/
[2] https://newsroom.wakehealth.edu/News-Releases/2021/08/Atrium-Health-Wake-Forest-Baptist-Begins-Delivering-COVID19-Vaccines-via-Drone

Under Pressure

COVID associated with higher blood pressure levels.

The COVID-19 pandemic hasn't just been detrimental to respiratory health. According to new research published in the *American Heart Association's* journal *Circulation*, COVID has also been associated with higher blood pressure levels among middle-aged adults across the U.S.

Nearly half of American adults have high blood pressure, a leading cause of heart disease, and nearly 75% of all cases remain above the recommended blood pressure levels.

The shift to remote health care amid the pandemic for numerous chronic health conditions including high blood pressure had a negative impact on healthy lifestyle behaviors for many people.

"At the start of the pandemic, most people were not taking good care of themselves. Increases in blood pressure were likely related to changes in eating habits, increased alcohol consumption, less physical activity, decreased medication adherence, more emotional stress and poor sleep," said lead study author Luke J. Laffin, M.D., co-director of the Center for Blood Pressure Disorders at the Cleveland Clinic in Cleveland, Ohio. "And we know that even small rises in blood pressure increase one's risk of stroke and other adverse cardiovascular disease events."

Researchers accessed de-identified health data from an employee wellness program (included employees and spouses/partners) to assess changes in blood pressure levels before and during the COVID-19 pandemic. The data included nearly a half million adults across the U.S., average age of 46 years, 54% women, who had their blood pressure measured during an employee health screening every year from 2018 through 2020. The researchers compared monthly average blood pressures between 2018 and 2019 and blood pressure measures in January through March 2019 to January through March 2020 (pre-pandemic). They then reviewed blood pressure changes comparing April to December 2020 (during the pandemic) to April to December 2019 (pre-pandemic).

The analysis found:

- During the pandemic (April to December 2020), average increases in blood pressure each month ranged from 1.10 to 2.50 mm Hg higher for systolic blood pressure (the top number in a blood pressure reading that indicates how much pressure the blood is exerting against the artery walls with each contraction) and 0.14 to 0.53 mm Hg for diastolic blood pressure (the bottom number in a blood pressure reading indicates how much pressure the blood is exerting against the artery walls while the heart is resting, between contractions) compared to the same time period in 2019. Before the pandemic, blood pressure measures were largely unchanged when comparing study years.

- Higher increases in blood pressure measures were seen among women for both systolic and diastolic blood pressure, among older participants for systolic blood pressure, and in younger participants for diastolic blood pressure.

- From April to December 2020, compared to the pre-pandemic time period, more participants (26.8%) were re-categorized to a higher blood pressure category, while only 22% of participants moved to a lower blood pressure category.

Read more at: https://newsroom.heart.org/news/u-s-adults-blood-pressure-levels-increased-during-the-covid-19-pandemic.

BY ELIZABETH HILLA

Staffing, Stockpiles and Security

Three ways providers can reap more value from their distributor.

As we enter the third year of a global pandemic, many providers are taking stock of their supply chains. They're trying to figure out how supply chain can help lessen the challenge of staffing shortages and overworked caregivers. How to prepare for the new crisis. How to ensure supply chain integrity and avoid sub-quality or counterfeit products.

As you do your strategic thinking, be sure to engage with suppliers and leverage their expertise and counsel. For most organizations, the prime vendor distributor is the No. 1 trading partner, so I recommend starting there.

Here are some ideas to explore with your distributor:

Staffing

HHS recently reported that over 19% of all hospitals in the United States are experiencing critical staffing shortages. Levels of turnover and burnout in the nursing profession are unprecedented. To address this challenge, ask your distributor about:

- What additional services they can provide that relieve overworked frontline caregivers from product-related activities
- Whether your supply chain team and your distributor are duplicating any activities – such as vetting potential new suppliers – and how you might be able to avoid task redundancy
- What product innovations they'd recommend to make clinical care more efficient or otherwise reduce staff time

Stockpiles

Most healthcare organizations have increased inventory levels to avoid potential product shortages. And some are now carrying very large stockpiles of certain types of products like PPE. The problem is that shortage areas are hard to predict – availability of masks and gloves, for instance, has radically improved, while other categories are now constrained. So it's hard to stockpile your way out of a crisis. Instead, I recommend investigating how you can partner with your distributor to increase supply assurance without taking on all the inventory risks and costs yourself. Talk about:

- Programs like storage of bulk-buy inventories, sequestered emergency products, and other services for increasing safety stock of key items
- Inventory management services to ensure that safety stock items are turned and used before expiration
- Identification of the most critical product categories and pre-established substitutes for such items
- Forecast-sharing to better understand what the next high-demand or low-availability product areas might be

Product security

The "gray market" for medical supplies has existed since long before the pandemic, but the risks have increased in the last two years. In 2020, reports about counterfeit N95 respirators abounded; more recently we've heard horror stories about used nitrile gloves and counterfeit COVID tests. Fake or sub-quality products put patient lives at risk. The single best strategy for obtaining only authentic, approved products is to buy from established manufacturer partners or their authorized distributors. But sometimes products are unavailable and it's necessary to vet alternative sources. Talk to your distributor about:

- Identifying approved product substitutions when a preferred item is unavailable
- Criteria for vetting new suppliers when necessary, and who should manage this responsibility

Providers and distributors have been working together since the beginning of the pandemic. You don't have to face the challenges (and assume the risks) of the medical supply chain all by yourself. The challenges keep changing, but strong partnerships persist between providers and distributors. By maintaining strong lines of communication, providers can get more value from their distributors, and both parties can benefit.

For more ideas, visit www.streamlininghealthcare.org. ■

BY TODD EBERT

Cybersecurity and the Healthcare System

Protecting patients in today's connected world.

The widespread adoption of telemedicine and rapid shift to virtual operations during the COVID-19 pandemic has underscored the important role that information technology, software, and medical devices can play in improving patient care. However, the increased use of connected medical devices and software as a service (SaaS), the adoption of wireless technology, and overall increased medical device and service connectivity to the internet significantly increase the risks of cybersecurity incidents. As evidenced by recent cyberattacks, medical devices and services are vulnerable to cybersecurity threats that could jeopardize patient health, safety, and privacy.

Protecting against cyber threats is a shared responsibility among all healthcare stakeholders. As the sourcing and purchasing partners to America's acute and non-acute care providers, healthcare group purchasing organizations (GPOs) are committed to helping providers harness the benefits of technology to care for their patients while guarding against cyber threats. As part of that commitment, the Healthcare Supply Chain Association (HSCA), which represents the nation's leading GPOs, released key cybersecurity considerations to help healthcare stakeholders address cyber vulnerabilities while promoting the use of innovative technologies through:

- **Cybersecurity Training and Software:** Includes designating an information technology security officer, maintaining updated anti-virus software, and implementing role-appropriate cyber training and assessments
- **Equipment Acquisition Standards and Risk Coverage:** Includes ensuring compliance with regulatory standards for purchasing medical devices and updating legacy devices, providing insurance policies to cover cybersecurity risks, and validating devices by testing manufacturer claims
- **Data Encryption:** Includes encrypting personal authentication data as well as any confidential or sensitive information when practical
- **Information Sharing & Standards Organizations:** Includes participating in Information Sharing and Analysis Organizations (ISAOs), certifying that suppliers of network-accessible medical devices, software and services are compliant with current FDA guidance documents, and ensuring that manufacturers provide a Manufacturer Disclosure Statement for Medical Device Security

In today's connected world, ensuring the safety and security of medical devices and technologies is more important than ever. GPOs will continue to work closely with healthcare delivery organizations, service providers, and medical device manufacturers to enable first-class patient care while safeguarding patient health, privacy, and safety. ■

Todd Ebert, R.Ph., is the President and CEO of Healthcare Supply Chain Association (HSCA).

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BY PETE MERCER

Keeping Connections Alive

With some adjustments, the Federation of American Hospitals Conference and Business Exposition has continued to give provider and supplier communities an opportunity to interact amid the pandemic.

When the coronavirus hit in early 2020, the U.S. was faced with a lot of uncer-tainty and no rulebook to help people and businesses make safe and informed decisions. Business conferences across all industries came to a screeching halt, forcing a creative approach to live conferences through virtual portals and online hangouts. Even though modern tools and technology proved to be a unique solution to a dynamic problem, it is hard to replicate the value of meeting in-person.

As live events and conferences have slowly come back in the past year, business leaders have had to implement several changes to ensure the safety of the attendees and the overall success of the event. The Federation of American

Hospitals Conference and Business Exposition, one of the health industry's leading events, is returning this year to continue the tradition of giving members of the provider and supplier communities an opportunity to interact and conduct business while participating in continuing education programs.

"We were really fortunate to have one of the last meetings in 2020 and in 2021," Kerry Price, Senior Vice President, Operations, of the Federation of American Hospitals said. "After careful consideration and feedback from our attendees, in 2021 we changed the date to June 6-8 (traditionally held in March) and relocated from our usual home of Washington, DC to Nashville, Tennessee. We adhered to the current CDC COVID-19 guidelines and had a very successful meeting with more than 1,000 attendees. The FAH was one of the last in-person meetings in 2020 and one of the first in 2021!"

Navigating healthcare and business

For this year's conference, the Federation is addressing the biggest challenge that healthcare has faced for the past two years. Price said, "The theme and topics for the 2021 conference centered around the pandemic, its impact, and how we are doing business differently." The healthcare industry was hit hardest by the pandemic, which should provide fruitful conversations about how healthcare companies and hospitals can be better prepared in the future.

Just like before, this event gives suppliers an opportunity to meet directly with representatives from GPOs and IDNs. Federation said the conference will host approximately 90% of the buying power in the healthcare industry in one location, while featuring high-quality educational workshops that are designed to address current issues surrounding national accounts, capital equipment, pharmaceuticals, purchased services, and the supply chain. According to the FAH, "many companies are utilizing the FAH Business Exposition as their first quarter, and in some cases their second quarter, travel budget."

Changes to the conference

Conferences and live events may never look the same. With the state of the pandemic continuing to evolve and change, the Federation has had to make some adjustments to improve the safety for anyone who attends.

"For 2022, we will require vaccinations and adhere to recommended CDC guidelines," Price explained. "I think we will always be more mindful of cleanliness, and we have always made our attendees' health and well-being a top priority. We have also realized how important it is to continue to hold in-person meetings and will always strive to make this happen."

The healthcare industry was hit hardest by the pandemic, which should provide fruitful conversations about how healthcare companies and hospitals can be better prepared in the future.

Leaders in government, the business community, and the media will share their unique insights into the challenges of COVID-19 and what is being done to recover and navigate healthcare and business in the middle of a global pandemic. Additionally, attendees will hear about the experiences and challenges faced by those who manage the government programs that are critical to the healthcare industry.

The FAH will also recognize leaders and supply chain heroes for their work to support the healthcare industry and ensuring that hospitals are equipped with the tools they need to treat patients. "We also launched the Heartbeat of Healthcare Supply Chain Award at the Conference, which is an industry wide recognition program designed to spotlight the supply chain unsung heroes, who stepped up during the pandemic, but will continue annually, to recognize our supply chain heroes," Price said.

The challenges of live events going forward could change drastically, so flexibility is a crucial part of the process. Even with all the plans in place to mitigate any COVID-related complications, Price said she understands that having a contingency plan is better than not being prepared for a worst-case scenario. "We were so fortunate to have in-person meetings in 2020 and 2021; however, if we needed to, we would have found a way to connect virtually," Price said. "2022 will hopefully continue to build on what we learned in 2020 and 2021, find a way to keep people together in-person while protecting the health and well-being of our attendees."

The 2022 FAH Conference and Business Exposition will be held March 6-8, at the Washington Hilton in Washington, D.C. ■

CALENDAR

Due to COVID-19 restrictions at press time some dates and locations may change.

Association for Health Care Resource & Materials Management (AHRMM)

AHRMM22 Conference & Exhibition
August 7-10, 2022
Anaheim, California

Federation of American Hospitals

2022 FAH Conference and Business Exposition
March 6-8, 2022
Washington Hilton Hotel
Washington, DC

GHX

GHX Summit 22
May 9-12, 2022
The Diplomat
Hollywood, Fla.

Health Connect Partners

Spring 22 Hospital Supply Chain Conference
May 18-20, 2022
New Orleans, La.

Summer 22 Hospital Supply Chain Conference
June 20 – July 1, 2022 (Virtual)

IDN Summit

Spring IDN Summit & Reverse Expo
April 11-13, 2022
Omni Orlando Resort at ChampionsGate
Orlando, Fla.

Fall IDN Summit & Reverse Expo
August 29-31, 2022
JW Mariott Desert Ridge Resort and Space
Phoenix, Ariz.

Premier

Breakthroughs 22
June 21-23, 2022
Gaylord DC National Harbor
Washington, DC

Share Moving Media

National Accounts Summit
Dec. 1-2, 2022
Fort Worth, Texas

Vizient

2022 Connections Summit
Sept. 19-22, 2022
Wynn Hotel
Las Vegas, Nevada

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Industry Contracting News

PINC AI launches enhanced technology offering

PINC AI™, the technology and services platform of Premier, Inc., launched INsights, an enhanced self-service healthcare solution for the creation of customized, on-demand analytics.

INsights is a vendor-agnostic analytics platform that accesses PINC AI's cleansed, standardized, and risk-adjusted healthcare data, covering more than 45 percent of all U.S. hospital inpatient discharges. INsights users can leverage pre-developed analytics developed by PINC AI, as well as conduct customized data queries and visualizations using PINC AI or their own data sources. The platform will also serve as a development community, where users can crowdsource and share information, measures, queries and more with others.

INsights will be hosted on Microsoft Azure Synapse Analytics, providing users access to a reliable cloud-based platform and next-generation tools to accelerate their use of analytics and AI. With PINC AI data running on Azure Synapse, users will accelerate their time to insight with the unified experience that brings together the entire analytics lifecycle into a single pane of glass.

According to past data surveys, data scientists spend 70 to 80 percent of their time on data preparation tasks, such as loading and cleansing data. This significantly reduces their ability to be consultants and storytellers of their organizational data. INsights reduces this burden by providing access to pre-loaded datasets that are cleansed, normalized and linked together, automating all the data preparation tasks.

Early pilot-testing organizations leveraging INsights used the platform to create analytics that assess and measure a host of quality improvement efforts, including patient safety indicators, lab order turnaround times, length of stay by specific conditions and time to treatment metrics.

BD, Pfizer, Wellcome collaborate to improve antimicrobial stewardship practices

BD announced a collaboration with Pfizer Inc. and global charitable foundation Wellcome to better understand the role of diagnostics in advancing antimicrobial stewardship practices around the world.

Building on ongoing efforts to advance the role of diagnostics in tackling the challenge of antimicrobial resistance (AMR), this collaboration will survey existing diagnostic practices to highlight both benefits and gaps in diagnostic testing in AMR stewardship to improve and further advocate for patient care, clinical practice and health care economics.

AMR occurs when bacteria, viruses, fungi or parasites change over time and no longer respond to medicines. These changes make infections harder to treat and increase the risk of disease transmission, severe illness and death. As the organisms that cause infections become increasingly drug resistant, even common medical procedures – including surgery, childbirth and chemotherapy – can become increasingly life-threatening. A continued rise in AMR could take 10 million lives globally each year by 2050 – more than currently die from cancer.

Half of internet-connected devices in hospitals are vulnerable to hacks

According The Verge, half of internet-connected devices in hospitals have a vulnerability that puts patient safety, confidential data, and the utility of the device itself in jeopardy. This comes

from a report from the healthcare cybersecurity company Cynerio, which analyzed data from over 10 million devices at over 300 hospitals and health care facilities globally, collected through connectors attached to the devices as part of its security platform.

The report found that the devices that are most likely to have vulnerabilities are infusion pumps, which remotely connect to electronic medical records, pulls the correct dosage of a medication or other fluid, and dispenses it to the patient. Additionally, patient monitors that track things like heart rate, breathing rate, and ultrasounds are susceptible to hacks as well. A hack into devices like these could be used to hurt or threaten patients directly.

Intermountain Healthcare names Allison Corry as new head of supply chain organization

Intermountain Healthcare (Salt Lake City, UT) has named Allison Corry as the new chief supply chain officer and vice president of the health system's supply chain organization (SCO).

Allison Corry

In this role, Corry will lead the development of the Intermountain SCO's future digital roadmap creating the vision and strategic plans for all aspects of the operation including materials management, logistics, services, operations integration, and procurement. She is the first woman to serve in this role at Intermountain.

Intermountain says that one of the biggest changes Corry will help usher in is providing extraordinary service through faster adoption of technology. This includes using big data to better predict supply chain challenges, while shifting more aspects of hospital supply chain to a direct-to-consumer model. It also includes a new partnership with Zipline that will allow Intermountain to deliver medicine and other supplies directly to patients.

Corry says it's an important step in expanding the benefits of telemedicine.

Corry has worked at Intermountain for nearly three years, serving as the assistant vice president for the system's SCO's procurement team and has been a part of many of the innovations which have earned Intermountain's SCO national recognition.

HealthTrust division CoreTrust partners with GEODIS to expand full truckload (FTL) managed transportation solution

CoreTrust, a commercial group purchasing organization (GPO) and a division of HealthTrust, and GEODIS announced a strategic alliance to provide a full truckload (FTL) managed transportation solution to CoreTrust members.

The alliance expands CoreTrust Logistics' truckload freight offering to include a comprehensive FTL managed solution for member organizations. By tapping into the GEODIS network of more than 1,000 asset-based carriers, as well as its world-class managed transportation capabilities, CoreTrust members can achieve superior results in both procurement of contracted rates and end-to-end management of FTL shipments, the companies said.

The managed transportation solution goes beyond securing competitive pricing and includes a Transportation Management System, a dedicated operations team to manage FTL shipments, a portal providing visibility to shipment status, claims management, and freight audit and payment.

This end-to-end solution delivers both savings and efficiency improvement in CoreTrust members' supply chain functions.

"The transportation market has experienced significant inflation and every company needing to move products can benefit from the options afforded through this collaboration," added David Pollard, assistant vice president of CoreTrust Logistics. "Truckload rates have increased 25 to 30 percent, yet our members are confirming cost avoidance and significant savings with this comprehensive solution. Even in this inflationary market, this alliance is driving achievable and quantifiable value across full truckload transportation for CoreTrust members."

"By leveraging our expansive network of asset-based carriers to build a customized solution that focuses on improving service, controlling cost and optimizing freight spend dollars, our team of experts can customize a premium transportation solution based on CoreTrust members' unique supply chain needs," said Jeff McDermott, senior vice president of Transportation Management at GEODIS in Americas. "Ultimately, we will remove the hassle and time out of transportation procurement, contracting and FTL shipment management for CoreTrust members to make their processes more efficient, reduce costs and drive considerable long-lasting value to their businesses."

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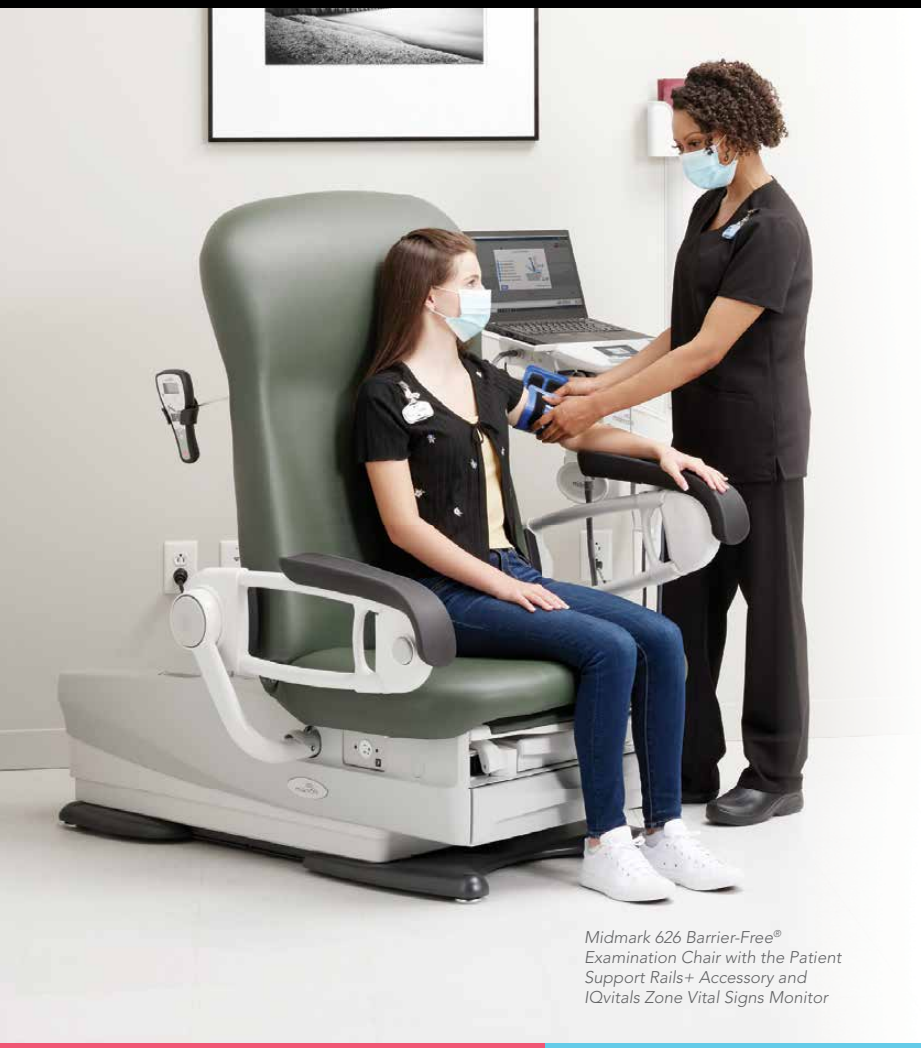

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= Better BP

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1 https://www.ama-assn.org/system/files/2020-11/in-office-bp-measurement-infographic.pdf

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