March 2025 • Vol.16 • No.2

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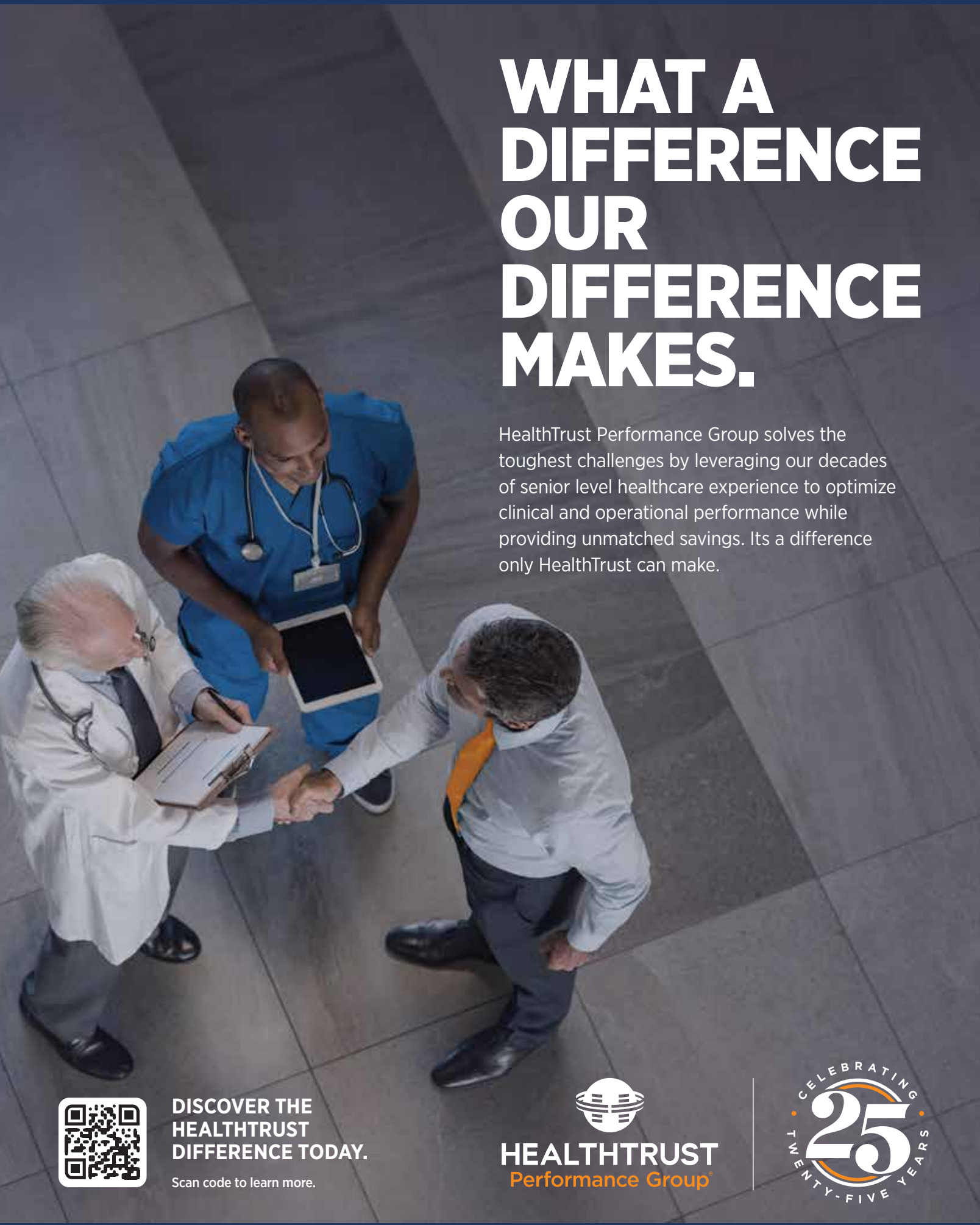

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The Journal of Healthcare Contracting
is published bi-monthly
by Share Moving Media
350 Town Center Ave, Ste. 201
Suwanee, GA 30024
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The Journal of Healthcare Contracting (ISSN 1548-4165) is published bi-monthly by Share Moving Media, 350 Town Center Ave, Ste 201, Suwanee, GA 30024.
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Healthy Hearts

A forecast of cardiovascular health 30 years from now did not paint a rosy picture. What can healthcare stakeholders do to create a better future for patients?

BY GRAHAM GARRISON

As a medical student, Dhruv S. Kazi, M.D., M.Sc., M.S., FAHA was fascinated by the physiology of the cardiovascular system – the heart sounds, the cyclical nature, the electrical system of the heart. Halfway through his training, he felt a calling to better understand not only what heart disease does to the individual patient, but what it does to us as a society. It felt intuitive that the two were connected.

"They are," said Dr. Kazi. "But it's a different mindset when you try and understand what a disease does to society, both from a health perspective and an economic perspective."

Dr. Kazi was a recent volunteer vice-chair of American Heart Association advisory writing groups tasked with forecasting what cardiovascular health could look like 30 years from now. The outlook is concerning if current trends continue.

Total costs related to cardiovascular disease (CVD) conditions are likely to triple by 2050, according to projections.

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At least 6 in 10 U.S. adults (61%) – more than 184 million people – are expected to have some type of CVD within the next 30 years, reflecting a disease prevalence that will have a $1.8 trillion price tag in direct and indirect costs.

What's causing it?

The AHA's forecasting exercise projects substantial increases in the burden of cardiovascular disease across all sections of society: young adults, middle-aged adults, older adults, men and women across all racial and ethnic groups, across all categories of insurance coverage, and educational attainment.

At the individual practitioner level, there needs to be heightened recognition that for many of the conditions that increase cardiovascular risk, there are very effective therapies already available.

Dr. Kazi said there are three drivers of the forecasted increases. First is the fact that the population is getting older. "As our population ages, heart disease increases as we get older. And so, as a population gets older, we see an increase in heart disease."

The second driver is that the burden of some of these risk factors is going up, in particular hypertension, diabetes, and obesity. From 2020 (the most recent data available) to 2050, projected increases of CVD and risk factors contributing to it in the U.S. include:

- High blood pressure will increase from 51.2% to 61.0%, and since high blood pressure is a type of CVD, this means more than 184 million people will have a clinical diagnosis of CVD by 2050, compared to 128 million in 2020.
- Cardiovascular disease, including stroke, (but not including high blood pressure) will increase from 11.3% to 15.0%, from 28 million to 45 million adults.
- Stroke prevalence will nearly double from 10 million to almost 20 million adults.
- Obesity will increase from 43.1% to 60.6%, impacting more than 180 million people.
- Diabetes will increase from 16.3% to 26.8%, impacting more than 80 million people.
- High blood pressure will be most prevalent in individuals 80 years and older; however, the number of people with hypertension will be highest – and rising – in younger and middle-aged adults (20-64 years of age).
- People aged 20-64 years also will have the highest prevalence and highest growth for obesity, with more than 70 million young adults having a poor diet.

The third driver is that the U.S. population is getting more diverse. Some of the subpopulations and racial ethnic groups have a higher burden of disease than others. Among adults aged 20 and older, projections note:

- Black adults have the highest prevalence of hypertension, diabetes, and obesity, along with the highest projected prevalence of inadequate sleep and poor diet.
- The total numbers of people with CVD will rise most among Hispanic adults with higher numbers also seen among Asian populations.
- Asian adults have the highest projected prevalence of inadequate physical activity.
- The aggregated group of American Indians/Alaskan Natives (AI/AN)/multiracial adults will have the highest projected prevalence of smoking.
- Among children, the projections found:
- Black children will have the highest prevalence of hypertension and diabetes.
- Hispanic children will have the highest prevalence of obesity and the greatest projected growth in hypertension, diabetes, and obesity.
- Asian children and Hispanic children had the highest prevalence of inadequate physical activity.
- AI/AN/multiracial children will have the highest prevalence of smoking.
- Black children and white children will have the highest prevalence of poor diet.
- The absolute increase in each risk factor will be greatest for Hispanic children, reflecting broader trends in population growth.

Past, present and future

Not all the projections were dire. There are several positive developments that forecasters found related to cardiovascular health. For instance, more adults in the U.S. are embracing the healthy behaviors of the AHA's Life's Essential 8, as prevalence rates for most are expected to improve:

- Inadequate physical inactivity rates will improve from 33.5% to 24.2%.
- Cigarette smoking rates will drop nearly by half, from 15.8% to 8.4%.

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- While more than 150 million people will have a poor diet, that is at least a slight improvement from 52.5% to 51.1%.

Indeed, as the AHA celebrated its centennial in 2024, the organization highlighted some "monumental" accomplishments in the fight against cardiovascular disease which includes all types of heart and vascular disease. Supported by efforts led by the Association, death rates from heart disease have been cut in half in the past 100 years. Deaths from stroke have been cut by a third since the creation of the American Stroke Association in 1998.

Dr. Kazi said we have much to celebrate in terms of the success of science and population health over the past century. Yet, there have been some alarming trends over the past decade that must be addressed. In particular, blood pressure control has declined, while diabetes and obesity have started to rise significantly.

"This contrasts with a long-term decline in blood cholesterol, for instance, that we don't fully understand," he said. "A shift to lower saturated fats in our diet has played some role, but this predates any medical intervention. We've also made great progress on average on tobacco control. Far fewer Americans smoke today than smoked say 30 to 50 years ago."

But that progress has been uneven. Some sections of society have made very dramatic progress compared with others. A classic example is tobacco control. It's very easy for individuals in certain sections of society to not know anyone who smokes, yet, smoking is often clustered in individuals of lower socioeconomic level, lower educational attainment. It's also rising in certain subpopulations like LGBTQ populations, which are being targeted by ads for products.

"So, I think there's much to celebrate on average across the country," said Dr. Kazi, "and yet a word of caution that the trends over the past decade are alarming both overall and in certain subpopulations."

At the individual practitioner level, there needs to be heightened recognition that for many of the conditions that increase cardiovascular risk, there are very effective therapies already available.

Heart disease has been the leading cause of death in the U.S. since the inception of the American Heart Association in 1924. Stroke is currently the fifth leading cause of death in the U.S. Together, they kill more people than all forms of cancers and chronic respiratory illnesses combined, with annual deaths from cardiovascular disease now approaching 1 million nationwide.

Making changes

Through its research and advocacy, the AHA hopes this data and forecasting will help both individual clinicians, health systems and policy makers plan better for the health of the populations they serve.

"We have been closely following trends in cardiovascular risk factors over time," Dr. Kazi said. "Yet, when I looked at recent trends on obesity and diabetes, they were really alarming. It has led me to believe that there is no future of good cardiovascular health in the U.S. that does not go through systematic efforts to address obesity and diabetes. We need to have an honest conversation about what our strategy is to help individuals and society as a whole to beat obesity. Because this is not an individual failing. This is a systematic issue in the country, something fundamentally broken in our food system that leads to such high levels of obesity not seen in many other parts of the world."

At the individual practitioner level, there needs to be heightened recognition that for many of the conditions that increase cardiovascular risk, there are very effective therapies already available. For instance, effective low-cost therapies for blood pressure have existed for a long time, yet blood pressure control remains poor. Or for individuals with high levels of cholesterol, clinicians can encourage and educate them on ways to do better in nutrition and exercise.

While there has been a general erosion of society's trust in sources of scientific and health information, whether it's from the general media, politicians, policymakers, etc., trust in clinicians, physicians, and caregivers remains very high. "That's bipartisan," Dr. Kazi said. "So, particularly as we live in a world of political polarization, I think clinicians should take their roles seriously as purveyors of high-quality health and lifestyle information. What can we do to support our patients?"

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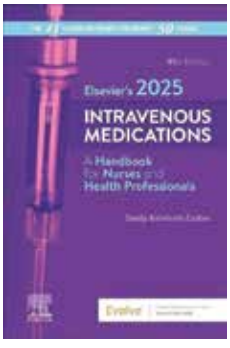

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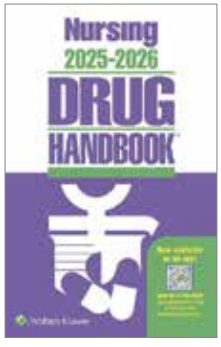

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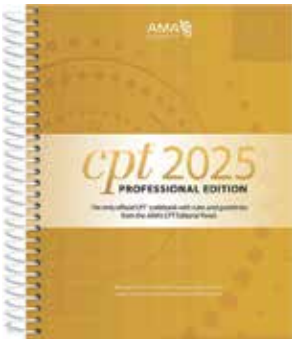

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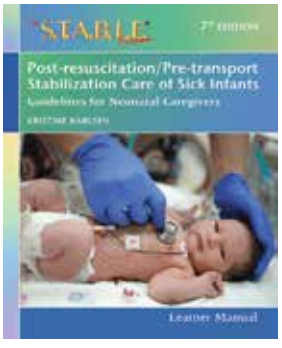

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Not every solution is going to involve a medication or an injection. Some solutions will require lifestyle changes or having a real conversation on how clinicians can help support patients to lose weight or manage diabetes better. Those changes for individuals might mean restricting salt so their blood pressure gets under control or increased physical activity – or even something as basic as more sleep.

"We now have compelling data on what sleep does to heart disease risk," Dr. Kazi said. "And I think the individual clinician can play a very vital role in communicating this information effectively to patients and families."

There is a fundamental need to think about how we in the U.S. provide access to high quality preventative care early in life and sustained access to care, because some of these weight trends start early in adolescence. Obesity among children (age 2-19 years of age) is estimated to rise from 20.6% in 2020 to 33.0% in 2050, increasing from 15 million to 26 million children with obesity; highest increases will be seen among children 2 to 5 years of age and 12 to 19 years of age. The prevalence of inadequate physical activity and poor diet among children is projected to remain high at nearly 60% each, exceeding 45 million children by 2050.

"How do we shift our focus from these high-cost procedures that we're doing late in life to a more robust primary care system where people can see their physicians, get their blood pressure in control well before they have their stroke or develop heart failure, get their weight under control well before they develop diabetes, for instance?" Dr. Kazi said. "That is going to require systematic strategies both within and outside the health system."

Within the healthcare system, it includes better access to primary care, and affordable pharmacological interventions that are effective like GLP-1 inhibitors. Outside the health system, it may involve subsidizing healthy foods, disincentivizing unhealthy foods like sugar-sweetened beverages and systematic strategies to reduce tobacco use.

On the healthcare system side, no conversation about the future of heart disease in the U.S. is complete without talking about weight loss drugs like Ozempic and Wegovy, Dr. Kazi said. The American Heart Association recently published some data finding that one in two U.S. adults is eligible for these therapies based on the current indications, and their indications continue to grow over time. These weight loss drugs have the potential to improve the population's health, but at the same time, they come with a very hefty price tag. Most people who start these drugs stop taking them at one or two years and lose most of the benefits.

"They're effective, but they're expensive, and they're also not a magic bullet," Dr. Kazi said. "They're not going to work unless we also invest in other systematic changes to our food supply or primary care system to make sure that patients can make sustainable lifestyle changes."

Imperatives

Improving cardiovascular health in the U.S. will take both prevention and treatment. If we put all our eggs in the treatment basket and ignore prevention, then we're not going to be able to make any sustained changes in society, Dr. Kazi said. At some point, it's going to be too expensive to manage as the population gets older.

The forecasting paper found that as a proportion of the GDP, cardiovascular disease will almost double by 2050 (with inflation already taken into account). When you compare it with GDP, that's a massive change between 2020 and 2050 if we don't start addressing it now.

"What we're trying to say is that there is a health imperative to make change," Dr. Kazi said, "but also an economic imperative to turn this ship around, because we won't be able to afford these kinds of expenses as a society if the trends continue."

Clinically, cardiovascular disease refers to a number of specific conditions, including coronary heart disease (including heart attack), heart failure, heart arrhythmias (including atrial fibrillation), vascular disease, congenital heart defects, stroke and hypertension (high blood pressure). However, while high blood pressure is considered a type of cardiovascular disease, it is also a major risk factor contributing to nearly all types of heart disease and stroke, so for the purposes of these analyses, high blood pressure was predicted separately from all CVD. The American Heart Association said this aligns with its Life's Essential 8™ – key measures of health factors and health behaviors identified for improving and maintaining cardiovascular health.

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Trigger Warning

Proper infection control practices by healthcare providers are critical to reduce the risk of sepsis.

Any type of infection can lead to sepsis, a life-threating emergency related to the body's extreme response to infection, according to the Centers for Disease Control (CDC). Without timely treatment, sepsis can quickly lead to tissue damage, organ failure, and death.

Each year, at least 1.7 million adults in America develop sepsis, according to the CDC. Bacterial infections cause most cases of sepsis; however, sepsis can also be the result of viral infections such as COVID-19 or influenza.

"Any infection, from the tiniest source (a bug bite, a hangnail, etc.) to the more severe (pneumonia, meningitis, and more), can trigger sepsis, which can lead to severe sepsis and septic shock," said Thomas Heymann, Sepsis Alliance President and CEO. "The infection can be bacterial, viral, fungal, or parasitic."

Infants and the elderly have the highest risk of developing sepsis, as well as patients that are immunocompromised or have a chronic illness. Most cases of sepsis begin before a patient goes to the hospital, according to the CDC, and at least 350,000 adults in the U.S. who develop sepsis die during hospitalization or are discharged to hospice.

Recognizing sepsis

Sepsis Alliance works across the nation to save lives and reduce suffering from sepsis by providing healthcare professionals, lawmakers, and the public with education and support on sepsis.

Recognizing the warning signs of sepsis can get patients to much-needed emergency care faster, according to Sepsis Alliance. Symptoms of sepsis, according to the CDC, include clammy or sweaty skin, confusion or disorientation, extreme pain or discomfort, fever, high heart rate or weak pulse, and shortness of breath.

"Sepsis Alliance uses the acronym 'It's About TIME™' when referring to the symptoms of sepsis, which include T- Temperature higher than normal, I- infection, M- mental status decline, and E- extremely ill, shortness of breath," said Heymann. "Sepsis is a medical emergency. It should be treated as quickly and efficiently as possible as soon as it has been identified."

Effective sepsis treatment in a healthcare setting includes the use of antibiotics, IV fluids, maintaining blood flow to organs, and other medications, according to Sepsis Alliance. Healthcare professionals will monitor a patient closely following a hospital admission for sepsis, carefully tracking vital signs and reassessing patient status.

Sepsis is an inflammatory response to infection, while septic shock is the most severe and life-threatening complication

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of sepsis. Patients with septic shock have very low blood pressure that cannot be easily corrected, often leading to multiple organ failure.

A significant number of people that receive sepsis treatment may still die in spite of it. "If sepsis is discovered and treated before it becomes septic shock, the mortality rate ranges from roughly 10% to 15%, nationwide, with striking exceptions on either side of that range," said Dr. Steven Simpson, the Board Chair of Sepsis Alliance. "Some hospitals have driven mortality below 5%, and some remain above 20%. Septic shock is similar. Overall septic shock mortality remains roughly 40%, nationwide, while truly excellent hospitals have their mortality rates down to the upper teens."

Hospital lengths of stay for sepsis vary on how ill a patient is when treatment begins. For those who do survive a sepsis hospitalization, said Dr. Simpson, about "75% will be left with chronic physical, psychological, or cognitive impairment."

"Treatment for sepsis includes rapid administration of antibiotics and fluids," said Heymann. "The risk of death from sepsis increases by an average of up to 7.6% with every hour that passes before treatment begins, which is why it's so important for the public and healthcare professionals to recognize its symptoms."

Sepsis Prevention

There are steps that can be taken to prevent infections leading to sepsis, including infection prevention awareness, practicing good hygiene, and understanding the signs and symptoms of sepsis.

Prevention of infections includes addressing chronic conditions and getting recommended vaccinations to reduce the severity of certain infections; keeping hands clean and wounds covered; and knowing the signs and symptoms of sepsis, according to the CDC.

"Sepsis Alliance stands behind the principle that 'Infection prevention is sepsis prevention™!'," said Heymann. "The only way to prevent sepsis is by preventing infections in the first place. That can be through vaccinations, good hygiene, proper care and treatment of wounds, hand washing, and antimicrobials as needed."

"Most hospitals have plans in place to prevent hospital acquired infections to the extent that they can – to prevent sepsis," said Dr. Simpson. "The best hospitals participate in continuous quality improvement to prevent infection in the patients they treat, and many of them participate in the CDC's Nation Health Safety Network, reporting their rates of nosocomial (hospital acquired) infection and implementing strategies to drive them down."

The future of sepsis prevention

The Centers for Medicare and Medicaid Services (CMS) designs Hospital Quality Initiatives (HQI) to assure delivery of quality health care for institutions. CMS defines sepsis for adults 18 years and older as having a source of infection plus two or more systemic inflammatory response syndrome criteria (SIRS), (based on temperature, respiratory rate, white blood cell count, etc.). Infection control for admitted sepsis patients is crucially important to their recovery.

"CMS considers certain infections to be 100% preventable and provides financial incentives on both the positive side (no infections) and the negative side (too many infections) to encourage hospitals to drive down infection rates," said Dr. Simpson. "Such conditions include post-surgery, catheter-associated central line infections, catheter-associated urinary tract infections, ventilator-associated pneumonia, and Clostridium difficile infections."

Infection control within healthcare settings includes proper physician education, disease tracking, multi-professional expertise, and more. According to the CDC, the development of a multi-disciplinary hospital sepsis program is critical to improving outcomes for sepsis patients.

"What we do as healthcare providers is to be vigilant, know that infections can occur, and intervene appropriately when they do – before the infection has a chance to evolve into the organ dysfunction that defines sepsis," said Dr. Simpson.

Sepsis Alliance believes in educating the public about the signs and symptoms of sepsis, so they know to seek emergency care quickly, as, according to Sepsis Alliance, mortality for sepsis increases by 4-9% for every hour that treatment is delayed.

The organization also educates healthcare professionals to better diagnose and treat sepsis and care for sepsis survivors; and works in government to pass legislation around sepsis, infection prevention, and antimicrobial resistance.

"Sepsis Alliance is striving toward a more sepsis-safe world," said Heymann. "We will save lives and limbs with our awareness efforts. Sepsis is a complicated, multi-faceted condition, as is our plan of attack for creating a more sepsis-safe world." ■

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Elevate Your Strategy

Maximizing Supply Chain IT

Healthcare might be missing a beat or two. Or merely byting off more than they can chew.

BY R. DANA BARLOW

Ask any industry observer about access to technology and they'll likely tell you we enjoy more computing power in the smallest possible packages (e.g., smart phones, tablets, wrist watches) than the astronauts did on Apollo 11 in 1969 when they landed on the moon.

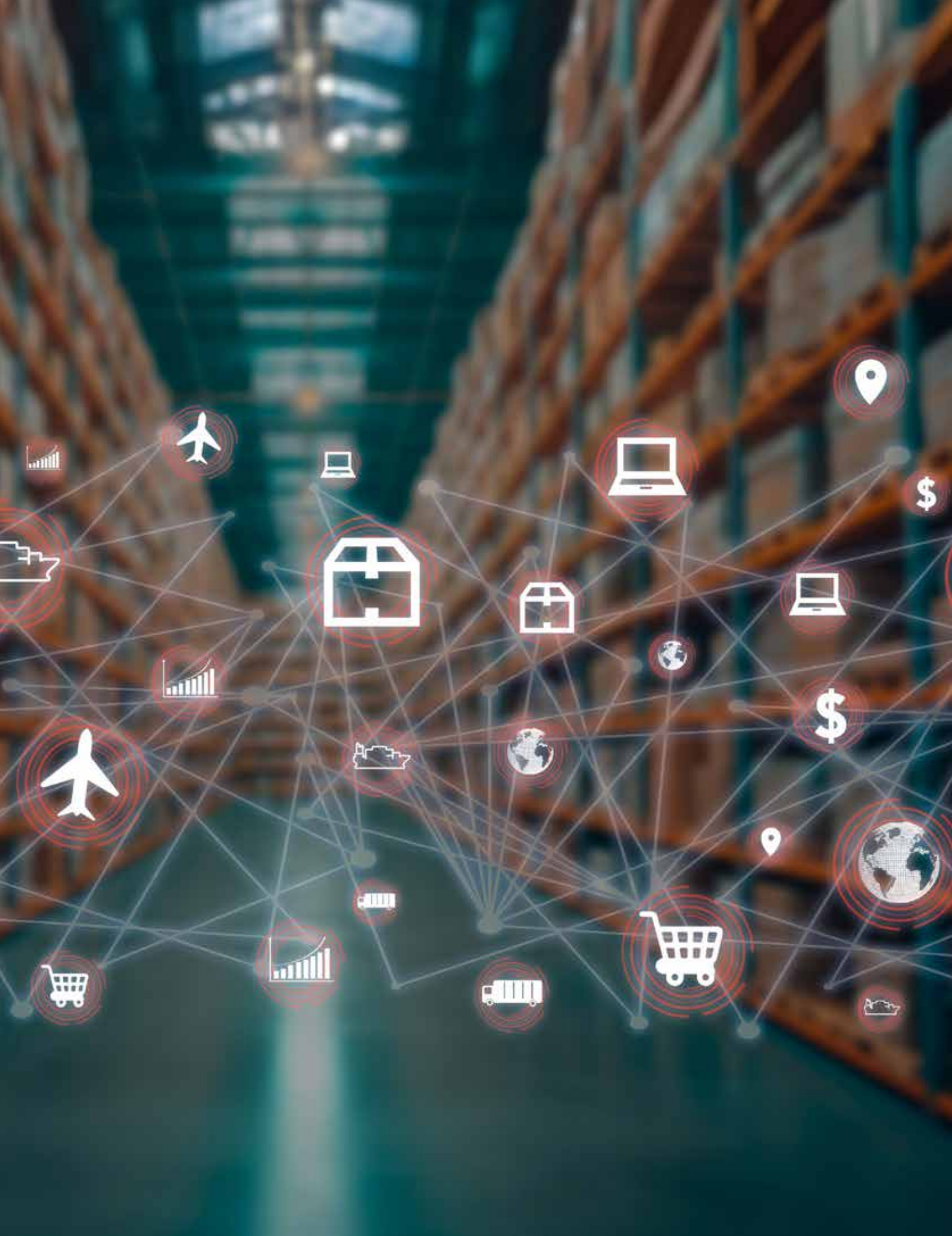
You also might hear that many of us only use a fraction of available features that arguably limit our potential, if not outright waste significant potential benefits.

Of course, that's by choice because we only may use what we think we need or even that with which we're comfortable accessing.

This begs the question: What if we're missing out on valuable benefits that could help us live, move and operate more effectively?

When applied to materials management information systems (MMIS) and the supply chain modules of enterprise resource planning (ERP) systems, this conjures a curious conundrum. And if you factor in the adoption and implementation of supply data standards – taking into account all of the relevant case studies, cost reports and success stories that have been extensively and exhaustively presented and published during the last four decades – the conundrum becomes a bit starker.

The debate about whether healthcare provider organizations fully utilize their IT resources, which can be amplified through the widespread, if not universal, adoption and implementation of supply data standards made possible through accurate, consistent or "clean" data, continues to simmer.



Not yet hitting the mark

Mike Gray, system vice president and Chief Supply Chain Officer, SSM Health, St. Louis, expresses sincere optimism but offers some cautionary caveats to add context. As a senior leader within a multi-hospital health system overseeing the "total non-labor spend universe," Gray believes this quandary extends beyond supply chain into other areas, including the C-suite.

Because an integrated delivery network (IDN) like SSM Health relies on system-wide IT, "maximizing the value of the Human Resources, Finance and Supply Chain components of what is typically thought of as an Enterprise Resource Planning (ERP) toolset is much broader and deeper than focusing on the Procure to Pay and subsequent inventory management of supplies alone," Gray told *The Journal of Healthcare Contracting*. "Add to that the sheer number of items we purchase – whether the item is a file or non-file item – matters as to what information is readily available/maintained within the item file."

Gray recalls prior experience in his career that seems consistent with what continues today.

"Obviously, none of that pertains to purchased services, which is a whole category of spend that tugs resources and interest away from the item maintenance requirements," he noted. "When I ran The Resource Group at Ascension, I was in position to drive all items we purchased into contracts. That work accounted for [about] 1.2 million line items. Only a fraction of those items, however, were placed in the item file and data elements fully maintained. The rest sat in a data mart of sorts."

Against that backdrop, Gray questions whether an organization can actually maximize MMIS or ERP horsepower.

"The deployment of the generally accepted three parts of an ERP typically focuses on the intersection of these tools with an emphasis on just trying to keep the organization operating," Gray indicated. "An ERP deployment happens so infrequently in health systems that the health system requires the assistance of an integrator/consultant. Most of those integrators are consultants that are very finance heavy in their core business focus, so they naturally gravitate to that work, leaving supply chain to self-resource for data elements not in the critical path of financial reporting."

SSM maintains access to the 14-digit number in GHX's Nuvia system, through which they generate transactions for much of their items, but they do not currently maintain the Unique Device Identifier (UDI) in its ERP, according to Gray.

"All that is to say, there are lots of reasons supply chain leaders may have partial deployment of data elements depending on the initiatives of interest to the organization," he said.

Gray certainly is not alone.

"I believe organizations are at different stages of maturity in use of their tools and technology," acknowledged Kate Polczynski, CMRP, vice president, Enterprise Supply Chain, Geisinger, Danville, Pennsylvania. "What has been notable over the past few years is a tremendous investment by healthcare organizations in evaluating current needs and future state opportunity for ERP technology advancements. In speaking with colleagues across the country, there are more sharing they are either recently through, actively in flight or planning in very near term for technology transformation assessment."

Polczynski also applies experiential context to the slow development and progression of IT maximization within healthcare providers – including supply chain.

"Leading healthcare organizations who have been privileged with investment into their technology platforms are only taking the first step – optimizing these technologies to reduce duplication, think differently about process and identify

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opportunities to utilize technology to aid in addressing human resource/FTE or data challenges, [which] is the difficult next step we must accept.

"It is also important to note that many organizations are looking beyond core ERP technology to better optimize their end-to-end procure-to-pay process," she continued. "With so many suppliers on the market offering solutions to 'bolt on' to the ERP, it will be exciting to see what transformations the industry adopts as standard functionality for go-forward operations."

Polczynski identifies several capabilities that she and her colleagues and counterparts at other organizations aim to pursue, including:

- The opportunity for upstream and downstream communications to anticipate supply needs and expense
- Interconnectivity between contract identification, rebates and spend themes
- Forecasting future needs versus utilizing historical data for demand planning
- Real-time price benchmarking
- Real-time customer assistance/AI-generating chat bots
- User assistance through workflows

Jarod Otto, system director, Informatics & Strategic Operations, Supply Chain Management, UW Medicine, Seattle, admits they remain relatively new to the provider organization's ERP platform and are working to engage the vendor on a roadmap for future process improvements. He further acknowledges the benefits of supply scanning and UDI detail in the procedural space, but points to some technical, standardization and cultural issues that complicate point-of-use scanning.

Based on their growing experience with their new ERP, Otto notes that they are not yet fully using the cycle counting, demand forecasting, requisitioning, item management and inventory management capabilities in their ERP platform. "This is due to some limitations within the application, legacy practices and the bandwidth required to implement significant process change," he added.

"The supplier industry must find an incentive to actively engage and drive forward the data standards required to accomplish these goals. Until there is a 'reason' that benefits this investment from their lens."

Such acknowledgements may leave executives like Gray, Polczynski and Otto and others to ponder three potential observations:

1. Continue the status quo and don't worry about maximizing software capabilities to the fullest extent because few are doing it anyway.
2. Continue to explore what additional opportunities that can be squeezed from the software while poking through and overcoming application limitations, legacy practices and bandwidth restrictions.
3. Anticipate that software developers recognize market limitations, survey customers and determine what capabilities to drop from the product(s) in an effort to lower the pricing for customers seeking to cut costs in every way possible.

Two of the three aren't necessarily out of reach.

Lighting the torch

Based on that backdrop, what elements might motivate supply chain executives to try and maximize IT horsepower? Budgetary concerns? Cost-cutting and efficiency demands? Justifying the costly investment in high-powered IT systems? Making effective use of supply data standards, such as UDI, for maximum clinical, financial and operational benefits?

"Without reliable data sets to analyze, integrate and automate from – there will forever be a lack of full optimization," Geisinger's Polczynski noted. "Financial pressures and industry challenges will continue to drive a need for more efficient transactions, as well as more innovative solutions.

Then how concerned should the industry and profession be knowing that a lack of accurate, if not "consistent," data remains outstanding, which also complicates, if not nullifies, the effective use of supply data standards, which then slows, if not prevents, the optimal use of supply chain IT?

"For us to reduce the cost of healthcare, ultimately driving towards our mutual missions, transparency in data is critical," Polczynski said. "The supplier industry must find an incentive to actively engage and drive forward the data standards required to accomplish these goals. Until there is a 'reason' that benefits this investment from their lens."

UW Medicine also looks to the IT vendors to deploy some human intelligence to advise on how to make full use of the technology they designed and marketed to

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the industry. Key areas include additional cost reduction requirements and scorecarding information from the ERP vendor, according to Otto. "We're interested in how to utilize areas of the application that our team wasn't ready to implement during the transition process," he added.

SSM Health's Gray points to another potential motivation.

"Though there are other areas missed, such as automation, I understand the focus is on the data," he noted. "Ultimately, it is less about the ERP than it is about the organization's commitment to data management and the interconnectivity of the item file to the electronic health record (EHR). Having the consistent data – even if it is not pristine – is critical to being able to get to engage clinical leaders in the various specialties to reduce the unnecessary procedural variability, outcome variability, product use variability and case-cost variability. Understand that 'clean' data provides the base for action that ultimately includes reducing the 'bill of materials' variability embedded in the individual physician preference cards. This is by far a bigger motivator of health system leaders than the external supply chain benefits, identification of problem devices, enhanced tracking, recall support and streamlined procurement."

Standards can power the engine

Some harbor the notion that adopting and implementing universal supply data standards (e.g., UDI) might serve as the key to unlock the full use of MMIS or ERP technologies as well as benefiting business intelligence and patient care.

"Adopting and implementing universal supply data standards will only aid ERP expansion if all parties up and down stream in the workflows also adopt and implement," Polczynski said. "The adoption of these standards can be an incredible asset to bringing forward transparency and accountability in the P2P process. Another meaningful benefit that can come from implementation could be directly linked to patient outcomes and quality. End-to-end data continuity provides full line of sight through to patient use and billing – which can also provide critical insight into patient outcomes."

Polczynski further indicates that several groups across the healthcare supply chain industry are working towards supply data standards adoption and implementation, including the Clinical Operations Subgroup within the Strategic Marketplace Initiative (SMI), active dialogue within the Healthcare Transformation Group's (HTG) UDI Workgroup and within the Supply Chain Resource Council of the Association for Healthcare Resource & Materials Management (AHRMM).

Otto concurs. "We'll utilize supply data standards to assist with surgical supply data tracking, expiration management, standardization work and patient safety initiatives," he said. "There is some ongoing development work between our item content supplier and ERP vendor on the interface to handle [GS1 US Healthcare's] GTIN and UDI formats."

Still, Gray contends that financial and operational priorities serve as significant drivers.

"Just saying 'we need to do this to fully use the technology' doesn't provide a robust or even consistently defensible ROI that is necessary to get past the 'is the juice worth the squeeze' question when there are 172 initiatives that need to be done – and no historic initiatives sunset," Gray said.

Might flipping the cause-and-effect emphasis, akin to the good cop-bad-cop routine in a police interrogation room, make a difference? If senior management fails to grasp the gravity of the positive-oriented "maximizing IT use can generate considerably more efficiencies and significant savings" might they respond differently to "not maximizing IT use can lead to financial and operational waste of resources," which is more negatively hinged?

"Adopting and implementing universal supply data standards will only aid ERP expansion if all parties up and down stream in the workflows also adopt and implement."

"Further delay of implementation creates an environment of blur, waste and rework," Polczynski asserted. "There continues to be lack of clarity for who is the true source of truth for data – limiting the ability for further process integration and automation. Each organization is looking for solutions to cleanse data, streamline workflows, etc., when the data cleanse should be a one-and-done within the universal standards sectors."

Otto pulls back and refocuses the camera lens on what really should be valued. "Personally, I think that the biggest impact is to patient safety, tissue/implant tracking, and some opportunities for spend optimization," he noted. ■

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Maximizing value without compromising quality

Three tips to enhance lab value while maintaining quality and continuity

As the healthcare landscape continues to evolve, labs must thoughtfully maximize value across their operations to be able to navigate challenges and continue supporting the high-quality testing patients and providers rely on.

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Tip 1: Target the areas with the greatest impact

Because labs have many moving parts, setting your focus on the areas that have the greatest savings potential can help you maximize overall value while still maintaining quality. Your choice of products, and where you purchase them from, impacts almost every other aspect of laboratory success, including:

Overall costs

It's a common misconception that purchasing a product directly from the manufacturer will be less expensive than purchasing from a distributor. In fact, the opposite is often the case. As a laboratory products distributor, Cardinal Health purchases much higher volumes than the average lab typically would, which can enable us to secure better pricing for customers.

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Instead of shopping multiple manufacturers and distributors, consider maximizing efficiency by engaging distributors who can fulfill more of your products from one place. Cardinal Health distributes more than 500,000 SKUs from over 400 manufacturers, including our own Cardinal Health™ Brand Lab Products. For our customers, our extensive portfolio of laboratory products and capital equipment provides an opportunity to streamline the ordering and fulfillment process without sacrificing quality or choice.

The people using lab supplies and equipment

When evaluating your product selection, keep everyone who uses these products in mind and consider their input. Working with a single distributor for your laboratory products needs can maximize your staff's ability to succeed by simplifying your operations and inventory management and helping ensure that your staff has access to the quality products they need when they need them.

Tip 2: Collaboration, collaboration, collaboration

Healthcare is a team effort, and a lab's success depends on everyone from patients, nurses and physicians to lab professionals, lab leadership and supply chain.

The right distributor will listen to your needs, helping you manage your supply, identify quality products, evaluate samples to find the right fit, and more.

Too often, decisions impacting the lab are made without full input from the lab. For a supply chain team to provide what the lab and hospital or health system needs to succeed, both groups must commit to finding alignment together. Cardinal Health can help facilitate collaboration between lab stakeholders and supply chain, working to strengthen that relationship and establish transparent communications on both sides.

Tip 3: Leverage your distribution relationships

When so much of a lab's success relies on getting the right products at the right time, engaging a distributor that fundamentally understands your needs is critical. Look for distributors that:

- Already have an offering tailored to the needs of clinical labs
- Have personnel who can demonstrate a deep knowledge of the lab landscape
- Understand how important the work you do is to the healthcare ecosystem

The right distributor will listen to your needs, helping you manage your supply, identify quality products, evaluate samples to find the right fit, and more. Expand the value of your relationship with your distributor by keeping the lines of communication open and maintaining regular business reviews.

Combining value and quality

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Supply Chain's Supporting Role

A new comedy series set in a regional hospital is missing one key character. Can you guess who?

BY R. DANA BARLOW

Last November, the NBC network debuted a new hospital-based "mockumentary" show that may remind you of another famous and successful British comedy franchise adapted for an American audience known as "The Office."

"St. Denis Medical" is set at a struggling, underfunded (sound familiar?) small, regional hospital located in the Portland, Oregon metropolitan area and features an ensemble cast of archetypal personalities that you can mix-and-match with those comedic characters in that other show.

Dr. Joyce Henderson is one of the ensemble's three lead characters who narrates much of the storyline involving the hospital as the subject of a documentary-in-the-making. Henderson, a former oncology surgeon and department head, now serves as the executive director of the hospital. Seemingly oblivious to her shameless self-promoting, she tries too hard to be seen and respected as a leader even though she's clearly in over her head and doesn't feel comfortable being excluded from the camaraderie, hijinks and social hierarchy of her staff.

Another lead character, Dr. Ron, serves as the leading emergency department surgeon with a wry, sardonic wit. He's a cynical curmudgeon who laments sarcastically about examining a patient with a heart murmur for two minutes only to spend another 40 minutes filling out electronic health records.

Meanwhile, the character of Bruce represents the stereotypically arrogant trauma surgeon whose one-dimensional depth of character is wrapped in self-importance and the innate need to be worshipped, loved and desired by all.

Rounding out the trio of lead characters is Alex, the incredibly dedicated, overwrought and passionate supervising nurse who juggles her personal and professional lives (routinely blurring lines) and would do anything for her patients and her colleagues. Alex serves as the requisite mother hen around which the rest of the ensemble cast of clinical personalities orbit.

While the pilot show established the series' cadence and tone and introduced a cast of characters that should be familiar to many healthcare professionals, clinical or administrative, one character clearly was missing and had yet to emerge by mid-season: Someone from Supply Chain.

Case-in-point: Dr. Joyce Henderson chooses to invest in a costly "$300,000 Bravo Genesis 3-D mammography

machine" because "women are worth it" and she wants her hospital to become a "destination medical facility" to outshine competitors by offering "the best breast test in the west." The Bravo Genesis vendor team delivers the technology to a small room and asks Joyce where to install it. Joyce points to the window on the south wall so the natural light will add to the feng shui and positive flow of the room. The Bravo Genesis team leader offers this deadpan reply: "How about in the corner near the outlet?" Rim shot.

Supply Chain would have streamlined this.
Before the Bravo Genesis team leader loads the unit's software, he wisely asks Joyce if the hospital has the bandwidth to handle the dataflow because they usually "install such units in bigger hospitals." Not surprisingly, the hookup causes the hospital computer network to crash and requisite chaos and consternation ensues. Naturally, Joyce claims ignorance and punts the problem to IT to solve.

Supply Chain would have prevented this.
Before Joyce signs on the dotted line, she asks the Bravo Genesis team leader if the installed unit is the latest tech because she doesn't want to wake up in the morning to hear the announcement of something better that would make this unit obsolete. He reassures her that "this is the best there is." In a feeble, but transparent attempt to extract a discount she then points to a scuff on the unit.

Supply Chain would know better and would have known better ahead of time.
As the end credits roll, we see Joyce flummoxed for being charged a 10% restocking fee because she apparently had the unit de-installed.

Supply Chain would have read the original contract and known about this.
Many healthcare crises start when everyone ignores Supply Chain. In fact, many healthcare problems morph into crises and disasters when Supply Chain isn't consulted upfront or well in advance.

Supply Chain expertise in situations like this is not meant to dilute, douse or even undercut ambition, authority, control, development, growth and influence; it's there to enable and enhance them all, and ensure they happen naturally without recompense and redress.

Supply Chain doesn't need a seat in the C-suite to do what it does best, but it must be acknowledged and recognized as part of an organization's senior leadership.

Supply Chain is your AI – as in authentic intelligence – before artificial intelligence was "cool."

Supply Chain is the architect and the engineer that translates the artistic concepts, ideas and plans into workable and working operations.

Supply Chain strives to provide consistency among chaos, customer centricity and prominence. Supply chain often steps out of their comfort zone, embracing inconvenience to fulfill a need.

One of the healthcare systems featured this month – SSM Health's Supply Chain team – occupies a an easily accessible page on the organizations web site that promotes a very simple, but effective and elegant strategy: "We listen. We solve. We implement." They're not alone in harboring such helpful sentiment.

Supply Chain doesn't need a seat in the C-suite to do what it does best, but it must be acknowledged and recognized as part of an organization's senior leadership. Too much transpires without Supply Chain owning a clear pipeline of authority and power.

If we learned anything from the perils and predicaments wrought by the pandemic it's that everyone – from the C-suite through the rest of the org chart – must fully recognize, understand and embrace the essential nature of Supply Chain's contribution to clinical, financial and operational success. It starts with the people who create and develop the processes and then use the technology to make it all work for clinicians, administrators and the patients served. ■

R. Dana Barlow serves as a senior writer and columnist for The Journal of Healthcare Contracting. Barlow has nearly four decades of journalistic experience and has covered healthcare supply chain issues for more than 30 years. He can be reached at rickdanabarlow@wingfootmedia.biz.

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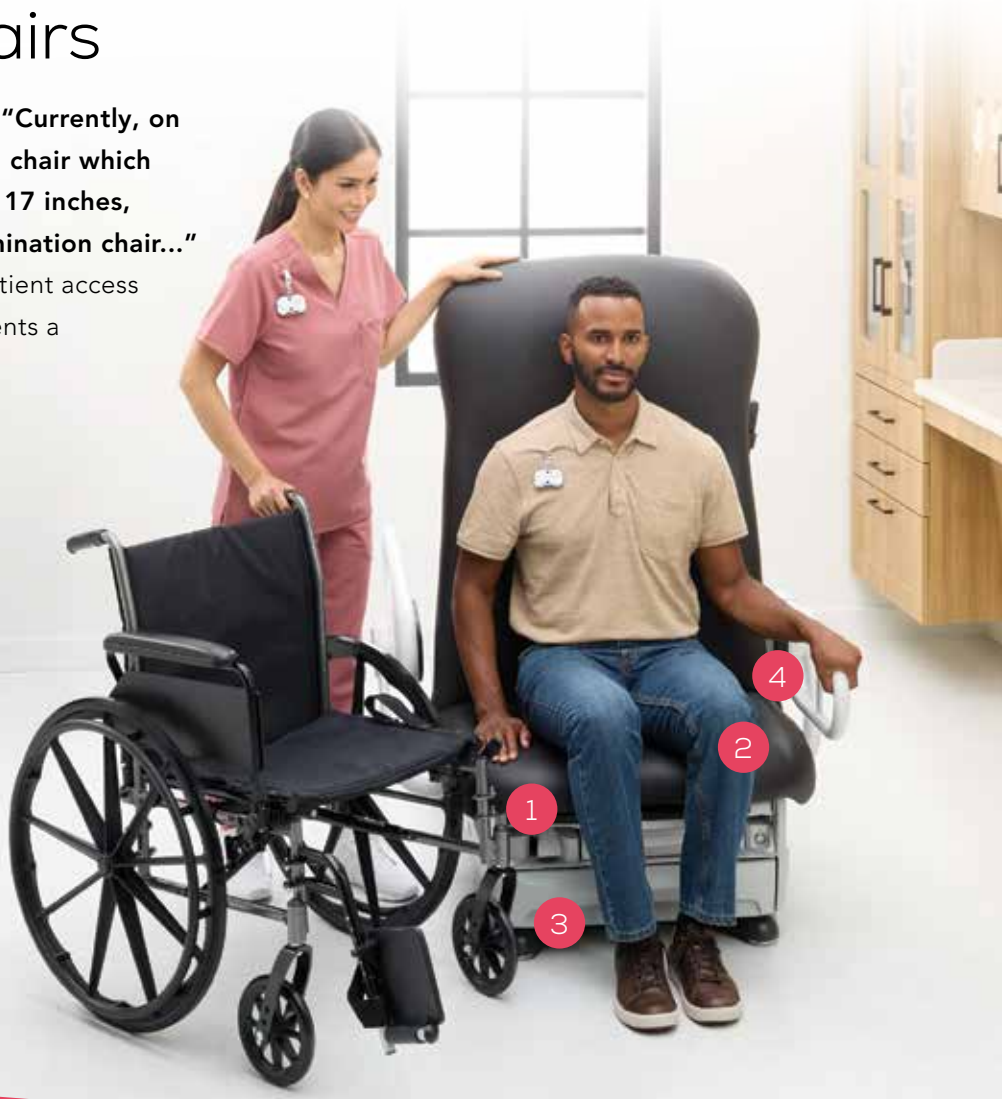

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1 https://www.federalregister.gov/documents/2024/07/25/2024-16266/standards-for-accessible-medical-diagnostic-equipment

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