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JUNE 2025

Beyond the shortage: The hidden cost of drug supply chain disruptions

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48002 06/25

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Executive summary

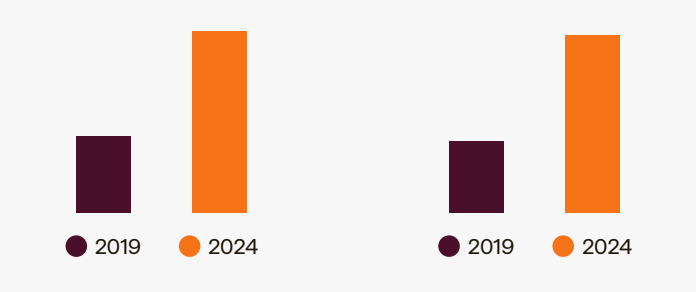
The 2024 Vizient drug shortages survey reveals a stark reality: Drug shortages are devastating healthcare systems nationwide, and the crisis has only deepened since 2019. Staffing burdens have escalated, consuming more time and resources, particularly in pediatric facilities, just to navigate daily drug shortage challenges. In 2024, U.S. hospitals spent a staggering 20 million hours annually managing these shortages, incurring nearly $900 million in associated costs—more than double the labor burden reported in 2019. Most facilities absorbed this pressure by shifting workloads onto already-stretched staff, with only a fraction choosing to hire additional pharmacy personnel. These findings underscore an urgent issue: Drug shortages don't merely disrupt supply—they drain time, money, and the resilience of an already strained healthcare system.

The 2024 survey results expose the continuing financial toll of drug shortages such as escalating hospital budgets and surging labor costs. With 74% of facilities reporting budget overruns—nearly identical to the 75% reported in our 2019 survey—no measurable economic progress has materialized. Labor costs tied to managing drug shortages have increased dramatically, rising from $359 million to $894 million between 2019 and 2024. Pediatric facilities have absorbed the greatest financial and labor strain.

The survey also identified an urgent need for stronger financial tracking, particularly for indirect costs driven by drug shortages, including delays in patient care and extended hospital stays. Reliance on secondary distributors for essential medications drives an average price increase of approximately 214% compared to primary distributors, compounding an already substantial financial burden.

Time spent managing drug shortages **increased** from **8.6M hours to 20.2M hours**

Labor costs associated with managing drug shortages **increased** from **$359M to $894M**



Communication gaps remain a critical barrier to effective drug shortage management. Survey respondents made clear the demand for earlier, more transparent notifications and accurate product release dates. These improvements would enable better planning, sharpen resource allocation, and reduce the negative impact on patient care. Access failures in the most critical drug categories compound the challenge further. Antineoplastic agents and emergency medications consistently rank as the hardest to secure during shortages, making reliable access to these essential therapies a non-negotiable system priority.

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NES and specifically the NES Reserve Program is an integral part of our inventory management process. We believe the only long-term strategy to stabilize the Vanderbilt drug supply chain is through commitments from us to the supplier, the supplier to Vanderbilt, and sufficient inventory on the shelf to overcome temporary disruptions. NES Reserve gives us the ideal platform to meet all three of these goals while also providing pricing benefits through our Vizient contracts.

Michael D. O’Neal, DPh, MBA
Senior Director – Pharmacy Supply Chain
Vanderbilt University Medical Center

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Drug shortages have disrupted patient care at every facility surveyed. Disruptions spanned clinical areas systemwide, with outpatient infusion services absorbing the greatest impact with 41% of all cases affected or delayed. Over the next decade, the number of patients using ambulatory service lines will increase by 17%.[1] This trajectory makes the stakes undeniable: shortages don't just strain operations, they directly threaten the quality and continuity of care patients depend on.

Significant challenges persist, but the progress toward supply stability and market resilience is real and measurable. We remain committed to supply assurance strategies that substantially limit the impact of drug shortages, which are powered by the dedication of pharmacists, technicians, nurses, and providers across the system. Through programs such as Novaplus Enhanced Supply (NES) and Novaplus Enhanced Supply Reserve (NES- R), our clients access a growing reserve of manufacturer inventory for critical medications. Since 2021, the program has supported the supply of over four million additional accessed units across more than 200 high-impact critical molecules, including many frequently reported in shortage. This expanded access strengthens medication availability, preserves continuity of care, and reinforces supply chain resilience. While there has been positive progress, the updated metrics confirm that market fragilities remain. As such, Vizient will continue expanding and enhancing strategies to ensure an uninterrupted supply of essential medications, delivering high-quality patient care without compromise.



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Background

Drug shortages in the U.S. are an escalating challenge that continues to set records. Organizations including the American Society of Health-System Pharmacists (ASHP) and the Institute for Safe Medication Practices (ISMP) have documented the severity of this accelerating trend. According to ASHP, drug shortages in the U.S. reached a record high in the first quarter of 2024, with 323 active shortages, surpassing the previous peak of 320 in 2014.[2] As of February 2025, there were 235 active drug shortages, with a cumulative total of 1,481 shortages over the past 10 years.[3] Alarmingly, 50% of the active shortages have persisted for two or more years.[4] In fact, the July 2023 ISMP survey on Drug, Supply and Equipment Shortages revealed that shortages continue to be a daily struggle, affecting more critical drugs that lacked suitable alternatives and lasting longer than in the past.[5]

Managing shortages has become an ongoing and labor-intensive process that further stretches already limited resources and tight margins. In 2019, the Vizient Drug Shortages Task Force conducted a client survey covering the period from July through December 2018. The responses confirmed that drug shortages increase resource pressures across every dimension—from labor to finances and across all care settings—taking a measurable toll on health system pharmacies. These shortages resulted in a staggering $359 million in financial implications and an additional 8.6 million hours of pharmacy labor annually in managing shortages.[6] Five years later, we deployed an enhanced client survey to assess how the drug shortage landscape had evolved.

The 2024 survey was conducted from April through September 2024, covering the period of January through December 2023 (see Appendix for more details). A total of 132 respondents provided insights on how drug shortages have impacted their facilities and patient care. The results confirm that many challenges identified in 2019 persist—and several have intensified.

In this report, findings are presented by referencing the following cohorts:

- Overall (including all facilities)
- Pediatric facilities (self-identified as pediatric) versus General facilities (non-pediatric facilities)

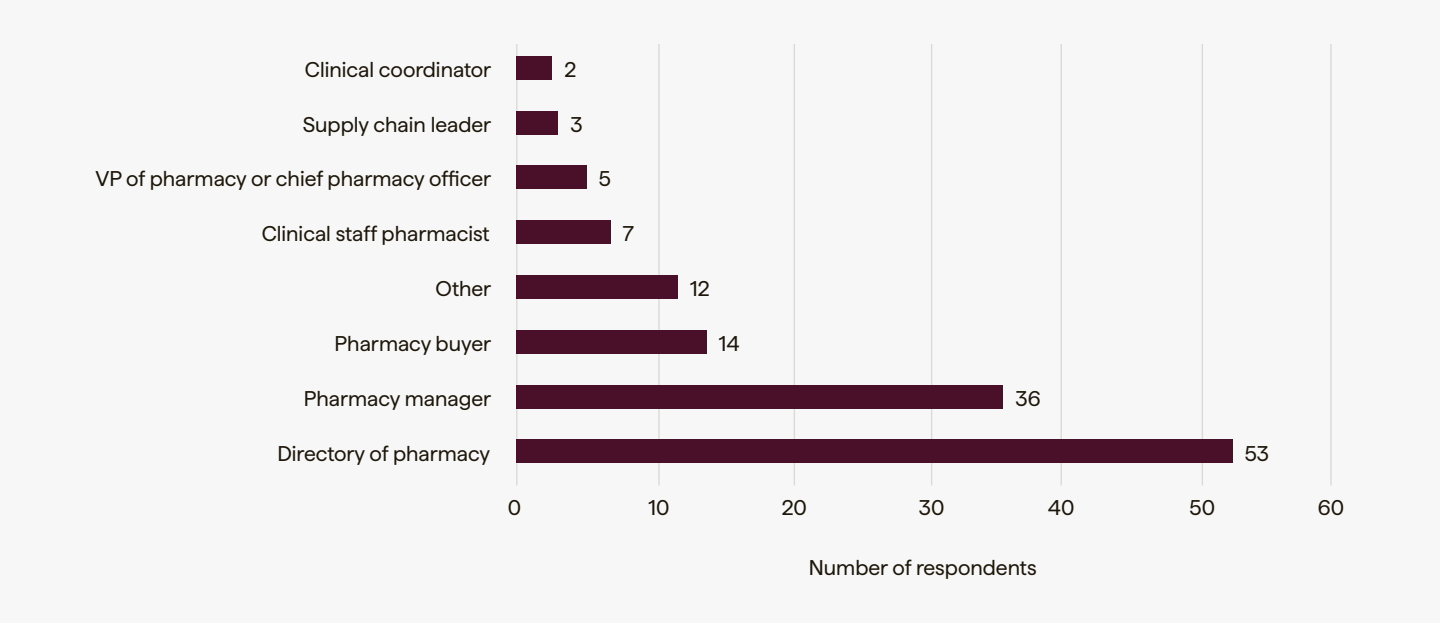
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Results

Survey participants

The 132 responses represent a broad cross-section of hospitals, clinics, and healthcare facilities, including health systems, medical centers, children's hospitals, small to large- sized hospitals, critical access hospitals, specialty hospitals, and ambulatory care facilities. Of these, 73% (97) came from individual facilities, while 27% (35) were from health systems. Most respondents held leadership positions within pharmacy and procurement departments (Figure 1). Directors of pharmacy were the most common role, accounting for 40% of respondents.

Figure 1. Participant category



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Characteristics of drug shortages

Number of monitored drug shortages

Table 1 details the number of drug shortages monitored internally across facility types in the 2024 survey. On average, hospitals tracked 43 active drug shortages at the time of the survey—with peak monitoring reaching 70 during 2023.

Pediatric facilities tracked at least 25% more shortages than general facilities. The breadth of medications required in pediatric care are often prone to shortages. Examples include specialty drugs for rare conditions, chemotherapy agents, critical care medications, and pediatric-specific formulations. The complexity of treating pediatric populations, who often require a combination of adult-approved and pediatric-approved therapies, means these facilities disproportionately monitor more shortages and manage inventory at any given time versus non-pediatric facilities.

Table 1. Number of shortages experienced by responding hospitals in the 2024 survey

Cohort	Overall (n=132)	Pediatric facilities (n=40)	General facilities (n=92)
Active number of shortages monitored by respondents during survey period			
Median	43	50	38
Maximum number of drug shortages monitored in 2023			
Median	70	84	67

Top drug classes and drugs with the highest impact on facilities

All 132 facilities responding to the survey highlighted various drugs that were often in shortage, with the top 10 drugs listed in Table 2.

Table 2. Top classes of drugs with the highest impact on facilities

Rank	Drug class (specific drug(s) noted)
1	Antineoplastics (cisplatin, carboplatin)
2	Benzodiazepines (lorazepam, diazepam)
3	Local anesthetics (bupivacaine, lidocaine)
4	Opioids (hydromorphone)
5	Replacement preparations (sodium bicarbonate)
6	Caloric agents (dextrose syringes)
7	Alpha- and beta-adrenergic agonists (epinephrine)
8	Non-barbiturates (ketamine)
9	Selective beta-2-adrenergic agonists (albuterol)
10	Antivirals (acyclovir)

Source: 2024 Vizient Drug Shortages Survey respondents

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As shown in Table 3, lorazepam injectables ranked as the highest-impact shortage for both general and pediatric facilities. Oncology agents such as cisplatin, carboplatin, and etoposide in general facilities and methotrexate and topotecan in pediatric facilities were also reported. General facilities faced additional pressure from shortages of critical "crash cart" medications, including dextrose, sodium bicarbonate, and epinephrine syringes.

The scale of that impact makes our NES program's reach significant: 85% of the high-impact drugs cited above, including bupivacaine with epinephrine and sodium bicarbonate, are covered under the program. Since 2023, the program has delivered our clients access to over four million additional supply units of manufacturer inventory, including more than 750,000 units of the highest-impact products identified in Table 3. Vizient drives this support through its programmatic infrastructure, without directly engaging in the storage or distribution of these medications.

Table 3. Top 10 reported drugs with the highest impact by facility type

Rank	Overall facilities	General facilities	Pediatric facilities
1	Lorazepam injection	Lorazepam injection	Lorazepam injection
2	Dextrose emergency syringe	Dextrose emergency syringe	Bupivacaine with epinephrine
3	Diazepam injection	Sodium bicarbonate	Methotrexate
4	Ketamine	Epinephrine	Ketamine
5	Epinephrine	Diazepam injection	Hydromorphone
6	Sodium bicarbonate	Ketamine	Albuterol
7	Cisplatin	Cisplatin	Bupivacaine
8	Hydromorphone	Carboplatin	Nalbuphine
9	Carboplatin	Etoposide injection	Diazepam injection
10	Bupivacaine with epinephrine	Lidocaine	Topotecan

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Financial impact

Among survey respondents, 74% exceeded their pharmacy budgets as a direct result of monitoring and managing shortages (Figure 2). That number has remained stubbornly flat since the 2019 survey, when 75% of respondents reported the same budget overruns. Pediatric facilities bear the greatest burden, with 79% reporting budget overruns compared to 72% of general facilities in the latest survey.

Figure 2. Percentage of facilities over budget due to monitoring and managing drug shortages

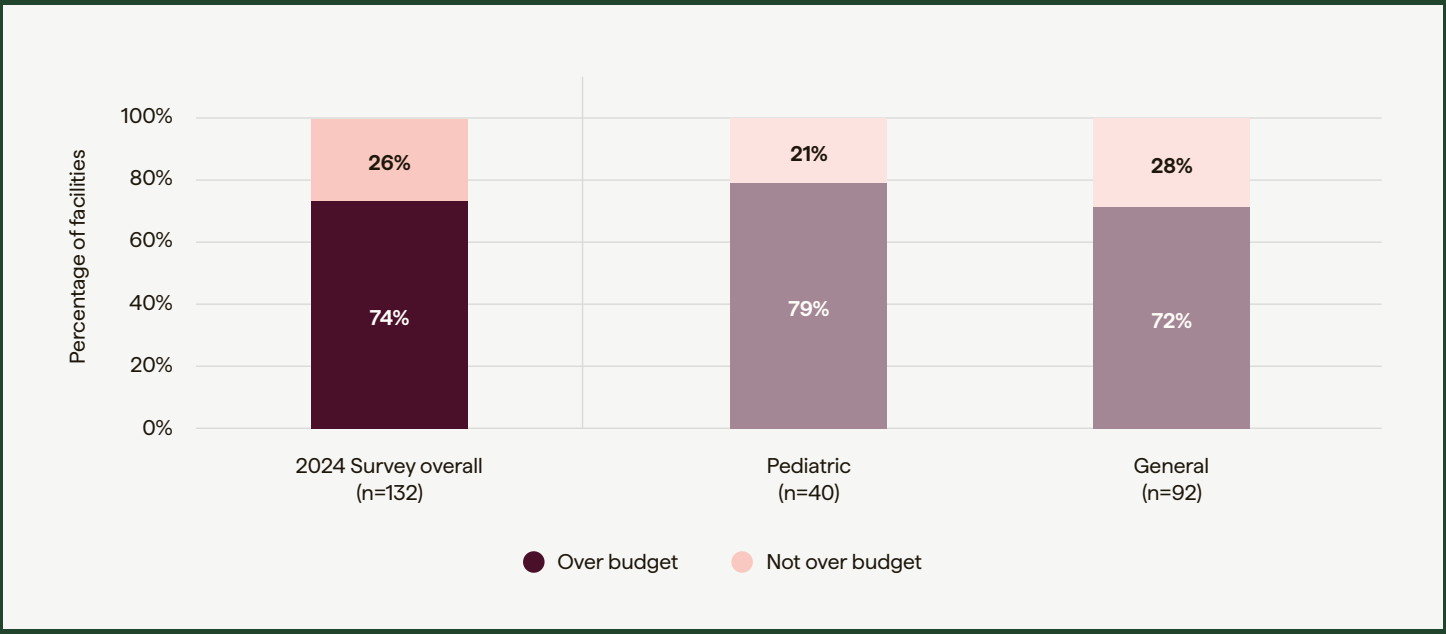


Figure 3 breaks down the budget overrun ranges detailed in Figure 2 across all facility types. Most facilities reporting overruns fall within the 1–10% and 11–20% ranges, but pediatric facilities skew higher, with a disproportionate share reporting overruns in the 21–30% range (Figure 3).

The data also reveals a systemic gap: many facilities confirmed budget overruns but couldn't quantify the precise percentage. This is a clear signal that financial tracking systems for drug shortage costs are inadequate. The highest reported budget overrun attributed to drug shortages reached $7 million, underscoring the severe financial exposure shortages create for healthcare facilities. Rising shortage frequency, compounded by general inflation and escalating labor costs, is driving budget pressure across the entire system. Without meaningful improvement in the shortage landscape, provider budgets will continue to absorb the damage.

The consequences extend beyond budget lines. Drug shortages compromise patient care, delay treatments, and drive up healthcare costs—forcing facilities into costlier alternatives and resource redistribution that disrupts overall care delivery. Addressing the root drivers of drug shortages, including supplier diversification, stronger budget planning, and proactive mitigation strategies, is essential to protecting care quality and financial stability.

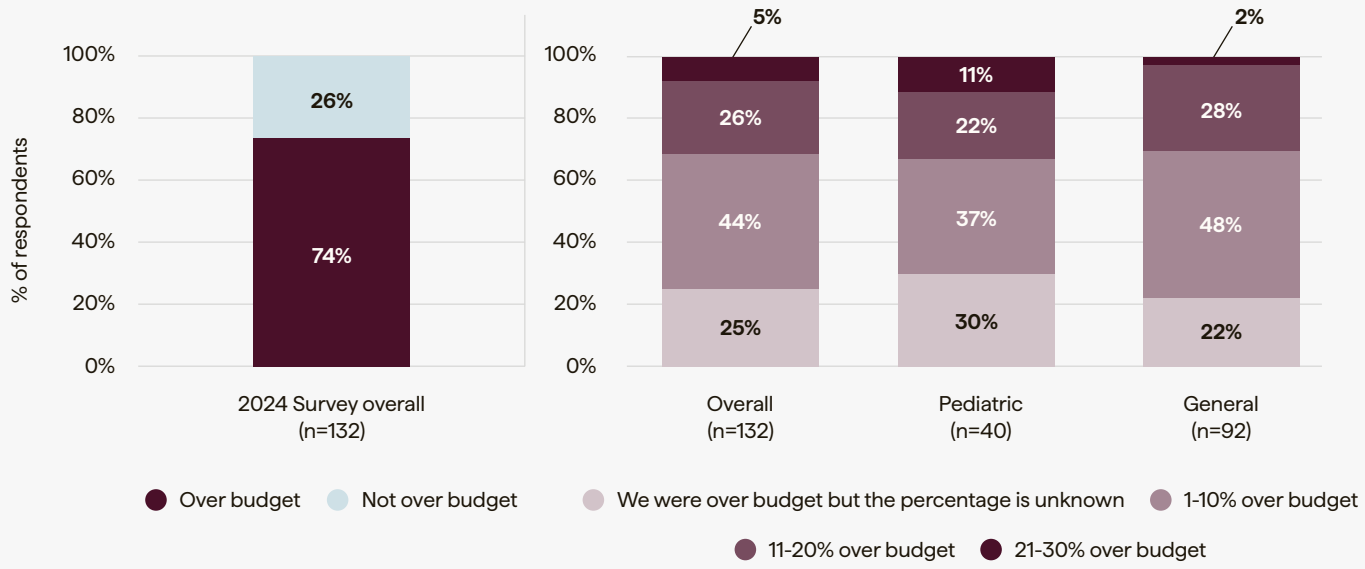
Vizient delivers strategic solutions that directly reduce these financial pressures through its contracting capabilities and pharmacy programs. Through the **Essential Medications List** and our NES programs, providers access price-stabilized inventory of high-need drugs—enabling better budget management during periods of volatility. Proactive contracting, expanded domestic manufacturer inventory, and streamlined purchasing through preferred channels reduce reliance on costly secondary distributors

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and drive meaningful cost efficiency. These programs deliver both immediate relief and long-term financial resilience for clients navigating ongoing shortages.

NES participation also eliminates hidden financial burdens—mitigating labor costs tied to sourcing alternatives and slashing the need for emergency purchasing. Estimated savings span avoided labor hours and inventory carrying costs, including warehousing. Since 2023, the NES programs have generated nearly $300 million in inventory cost avoidance for participating clients.

Figure 3. Distribution of budget overruns due to drug shortages (2024 survey)



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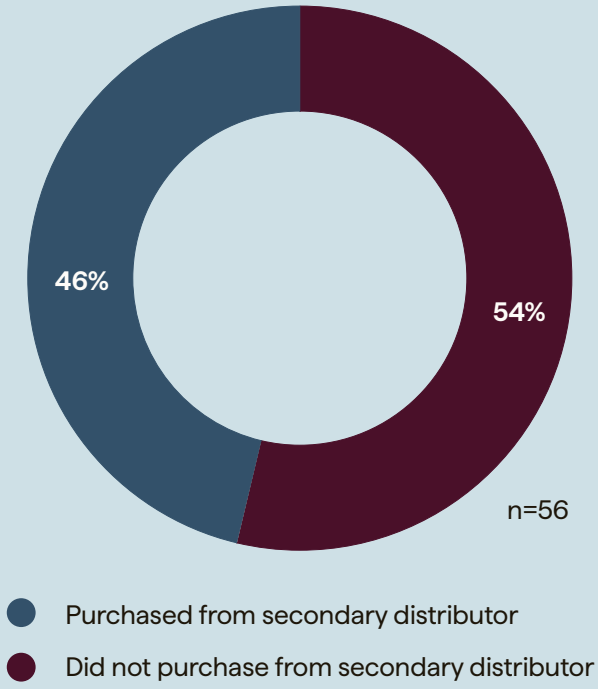
Secondary distributor utilization

The U.S. Food and Drug Administration (FDA) defines the gray market as "[drug] distribution channels not authorized by prescription drug manufacturers."[7] Gray market distributors take advantage of drug shortages by acquiring medications from secondary sources and reselling them to healthcare providers at dramatically inflated prices. These secondary distributors specifically target prescription drugs constrained through traditional distribution channels or actively listed on shortage. With the globalized U.S. drug supply chain, it's crucial to exercise caution and be aware of potential risks such as the increased risk of counterfeit or ineffective drugs associated with these types of distributors. During times of shortage, secondary distributors often bring in other suppliers who claim to have an available inventory of a drug that's in short supply. However, verifying the chain of custody, storage conditions, and integrity of these products can be challenging.

Among the 56 facilities reporting secondary distributor purchases, nearly half (46%) resorted to sourcing at least one molecule outside authorized channels (Figure 4). The most common drugs purchased included cisplatin, carboplatin, fluorouracil, and methotrexate, alongside etoposide, cyclopentolate, liposomal doxorubicin, sodium bicarbonate, betamethasone, vinblastine, acyclovir, pamidronate, and emergency drugs including epinephrine. The financial toll is stark: facilities purchasing from secondary distributors reported an average price increase of approximately 214% compared to normal pre-shortage purchasing. Price increases varied significantly by molecule. Some facilities absorbed a 25% markup while others faced increases as steep as 600%.

Secondary distributors compound pressure across the pharmaceutical supply chain, creating direct patient safety risks and severe financial strain on hospital and provider budgets. Healthcare providers must source pharmaceuticals exclusively from trusted, authorized distributors operating in full compliance with federal, state, and local regulations—avoiding secondary and gray market vendors entirely. The Vizient **NES programs** deliver a safer, more reliable alternative, including additional months of onshore manufacturer inventory warehoused in the U.S., preserving product integrity and eliminating the need for gray market purchases that drive up costs and introduce unacceptable risk.

Figure 4. Percentage of facilities reporting purchase(s) from a secondary distributor



Source: 2024 Vizient Drug Shortages Survey respondents

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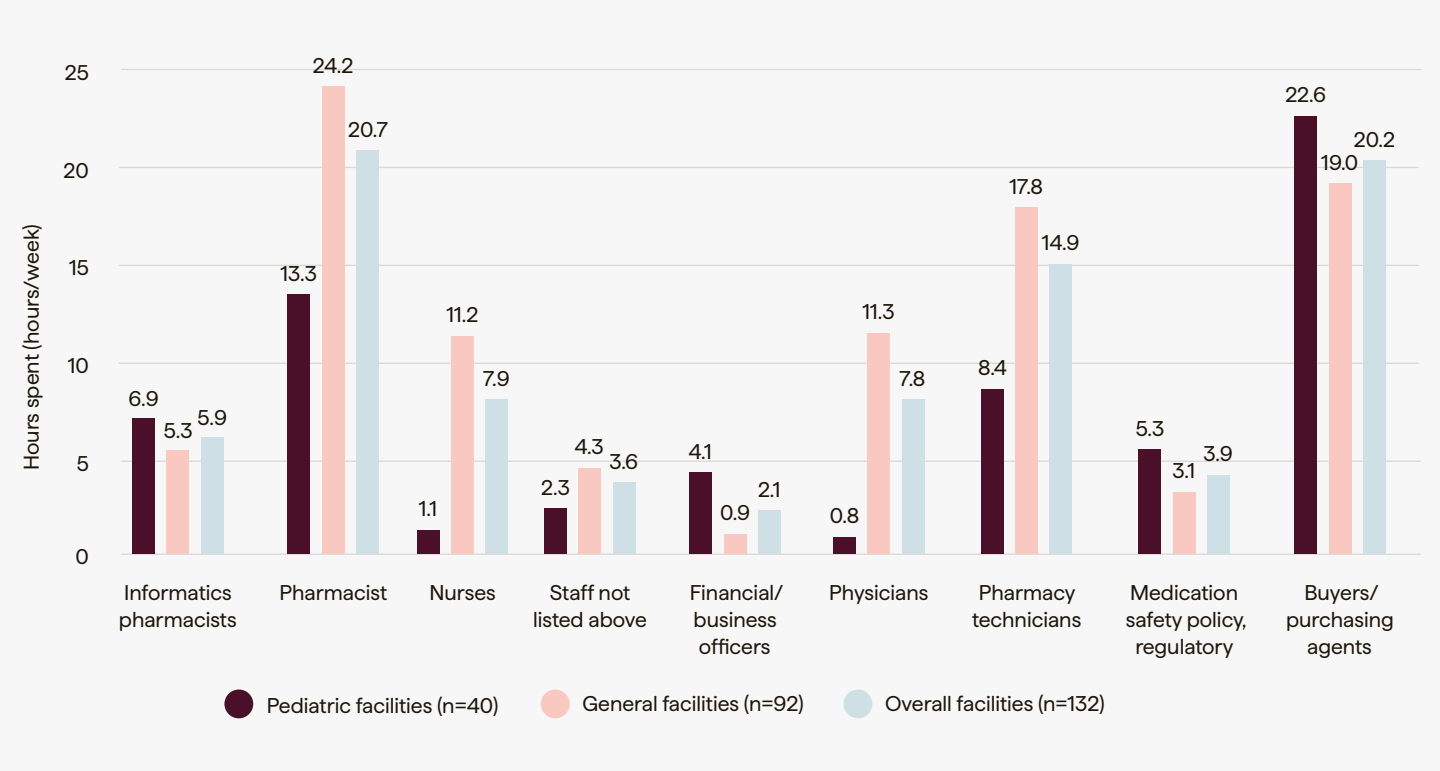
Staffing impact

Time spent managing shortages

The staffing burden of drug shortages has escalated sharply since 2019—and the data leaves no room for interpretation. Average time spent managing shortages has doubled for pharmacy staff in general facilities, rising from 10.5 hours per week in 2019 to 24.2 hours per week per facility in 2024.

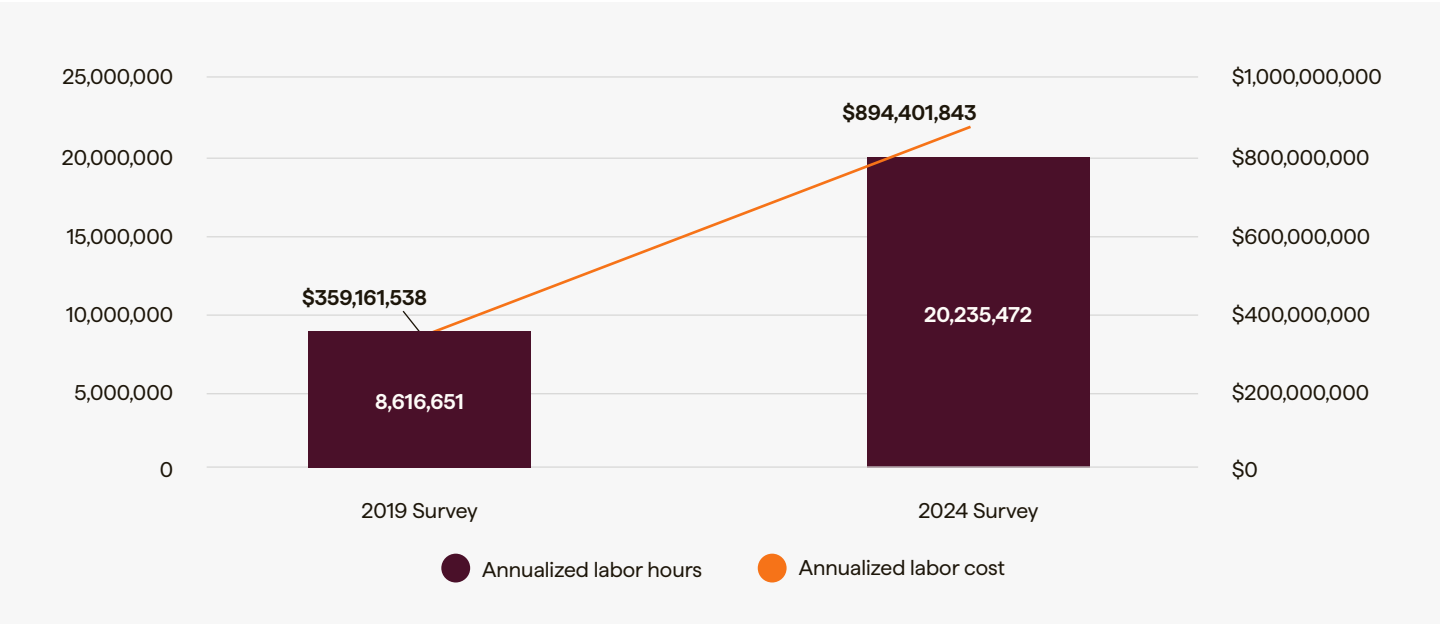
Extrapolating the 2024 survey data across all U.S. hospitals reveals the full scale of the crisis: $900 million in total labor costs and 20 million hours spent annually managing drug shortages, which is more than double the labor burden documented in our 2019 survey. The data was extrapolated to an annual U.S. number based on professions, hospital types, and number of hospitals in each category.[8,9] These figures don't capture the full cost: direct purchases through non-traditional distribution channels, delays to patient care, and other difficult-to-quantify impacts remain outside the scope of this analysis. The financial and staffing toll has intensified dramatically over the past five years, and without a significant reduction in drug shortages, that trajectory will only continue.

Figure 5. Average time spent managing drug shortages per week (2024 survey)



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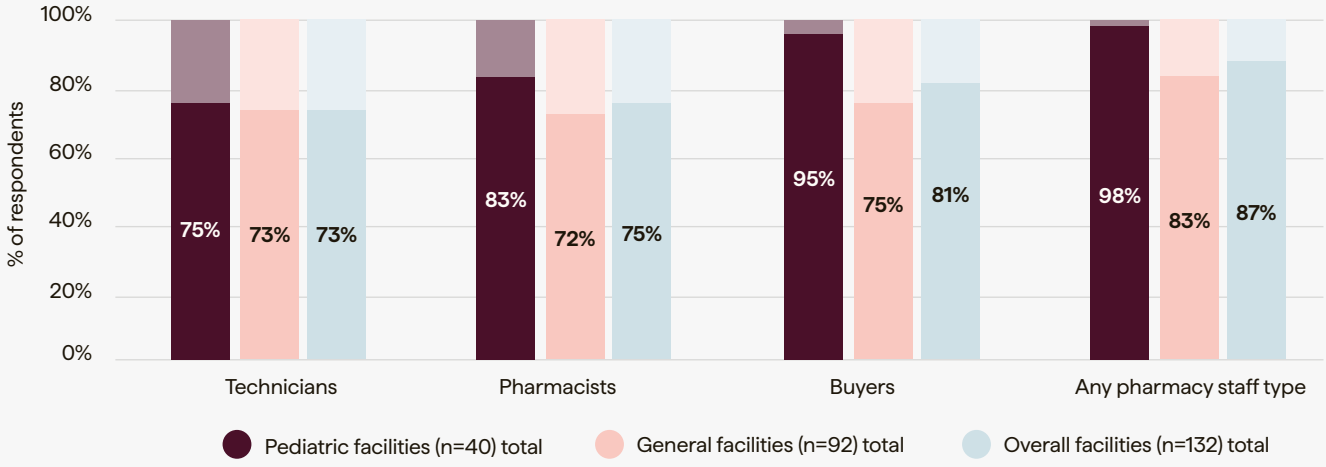
Figure 6. Annualized staffing impact growth from 2019 to 2024 survey



Staffing considerations

Drug shortages drive real organizational change by forcing facilities to restructure staff responsibilities and redirect resources just to maintain operations. One survey question examined pharmacy staffing adjustments as a direct mitigation strategy. Figure 7 details the percentage of facilities that modified pharmacy staffing—technicians, pharmacists, and buyers—to manage shortage demands, including workload redistribution, overtime, and new hires. Notably, 98% of pediatric facilities made staffing changes to address drug shortages, far outpacing the 83% of general facilities that took similar action.

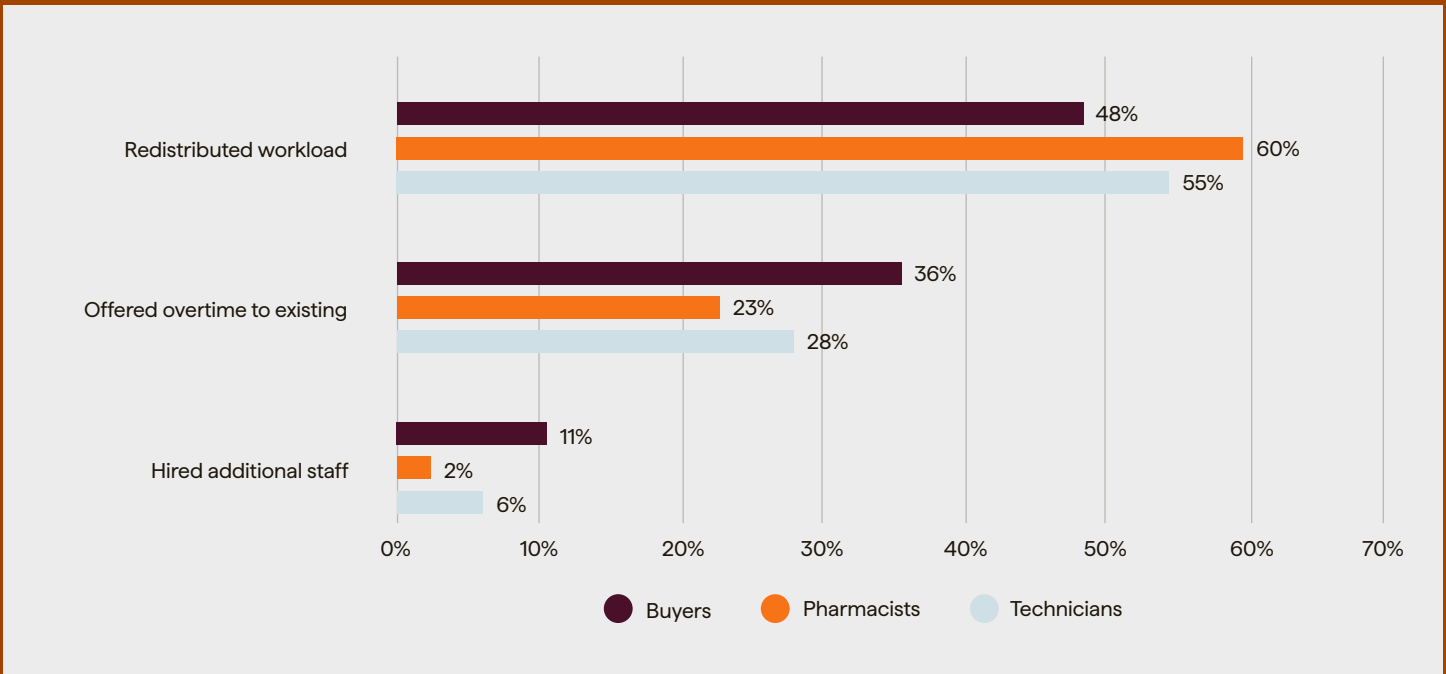
Figure 7. Overall percentage of facilities that made pharmacy staffing changes to mitigate drug shortages (2024 survey)



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Across pharmacy buyers, pharmacists, and technicians, the dominant response to shortage-driven workload demands was redistribution. Among the surveyed facilities, 48% to 60% of them absorbed the added burden on existing staff without adding headcount. An additional 23% to 36% turned to overtime as a pressure valve, while only 2% to 11% hired additional staff to meet shortage management demands (Figure 8). Workforce stability held across the board as no facilities reported furloughing staff during shortages, and layoffs remained an isolated exception.

Figure 8. Overall response to additional staffing considerations (n=132)

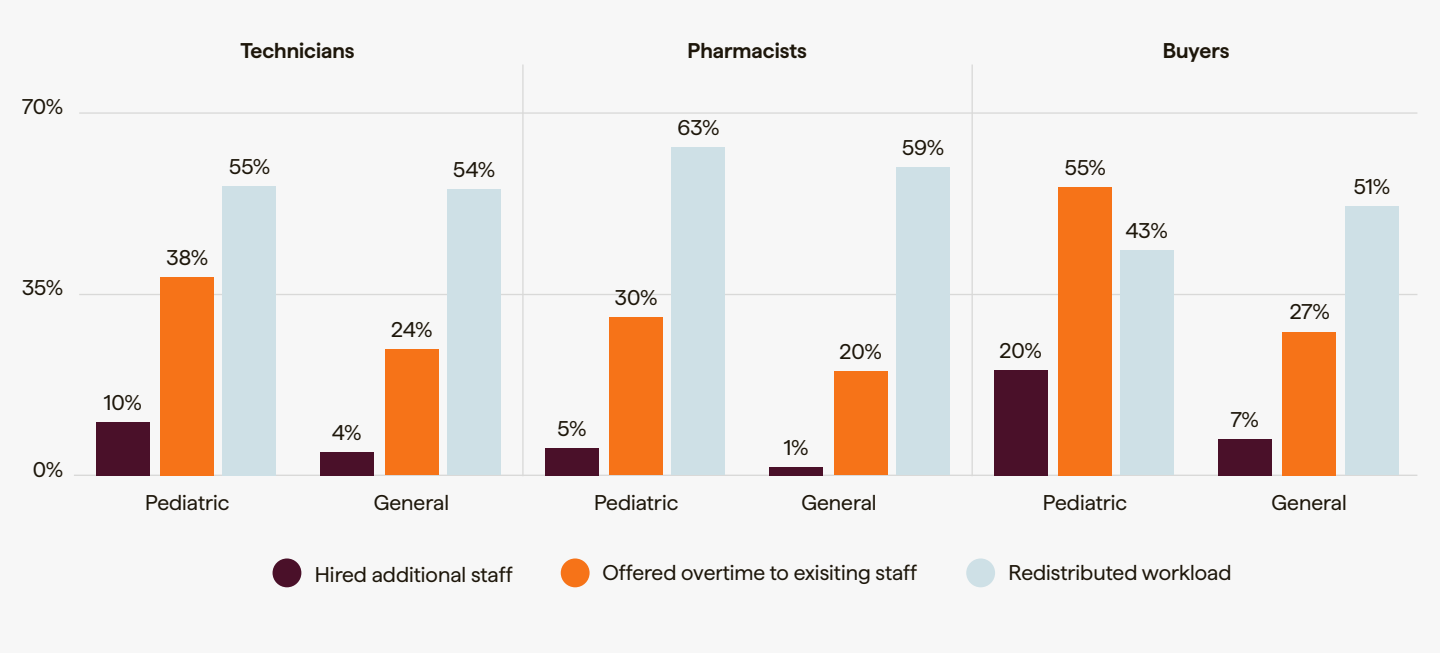


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Across all facility types and staff categories, workload redistribution without added headcount was the dominant response to shortage-driven demand (Figure 9). Pediatric facilities stand apart from this pattern in critical ways. Among pediatric respondents, 55% extended overtime to existing pharmacy buyers, and pediatric facilities recorded the highest frequency of additional pharmacy buyer hires to manage shortage demands (20%). The pattern is clear: pediatric facilities consistently enact staffing changes at higher rates than general facilities, driven by the greater complexity and responsiveness their patient populations demand.

Compounding amplifies that burden directly. When pre-mixed, ready-to-use products become unavailable, pharmacy teams absorb a significant increase in workload preparing intravenous and oral medications in-house. Pharmacy buyers face parallel pressure of needing to source appropriate substitutions for each unavailable medication, or identifying the individual components required for compounding. This challenge hits pediatric facilities hardest. Unlike general facilities, they already compound weight-based, patient-specific doses as standard practice, meaning shortage-driven compounding demands stack on top of an already complex baseline workload.

Figure 9. Additional staffing considerations response breakdown by facility type (general n=92 versus pediatric n=40)



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Patient care impact

Medication errors

Product and manufacturer substitutions during drug shortages create direct downstream risk for patients—and the data confirms that risk is materializing. ISMP highlights that hospitals find it extremely challenging to provide safe and appropriate drugs during a shortage. This can result in unsafe practices and compromised care to patients.[5] In the 2024 survey, 43% of respondents identified medication errors directly related to drug shortages—up from 38% in 2019. An additional 37% of respondents selected "unknown" or "do not track," exposing a significant gap in error tracking that demands attention. Shortage-related medication errors are inherently difficult to isolate. Multiple contributing factors converge in any single event, but closing this tracking gap is essential to understanding the full downstream impact of shortages on patients across the medication-use process.

Disruptions to patient care

Drug shortages disrupt patient care across every clinical setting—from the operating room to the outpatient infusion suite. In the context of surgery, drug shortages can disrupt vital procedures, leading to delays or modifications in treatment plans. Emergency departments can struggle to deliver essential medications when seconds matter. Patients dependent on outpatient infusions for chronic conditions face interrupted therapy and compromised continuity of care. Even routine hospital admissions absorb the impact, as shortages restrict access to commonly used medications and undermine effective treatment.

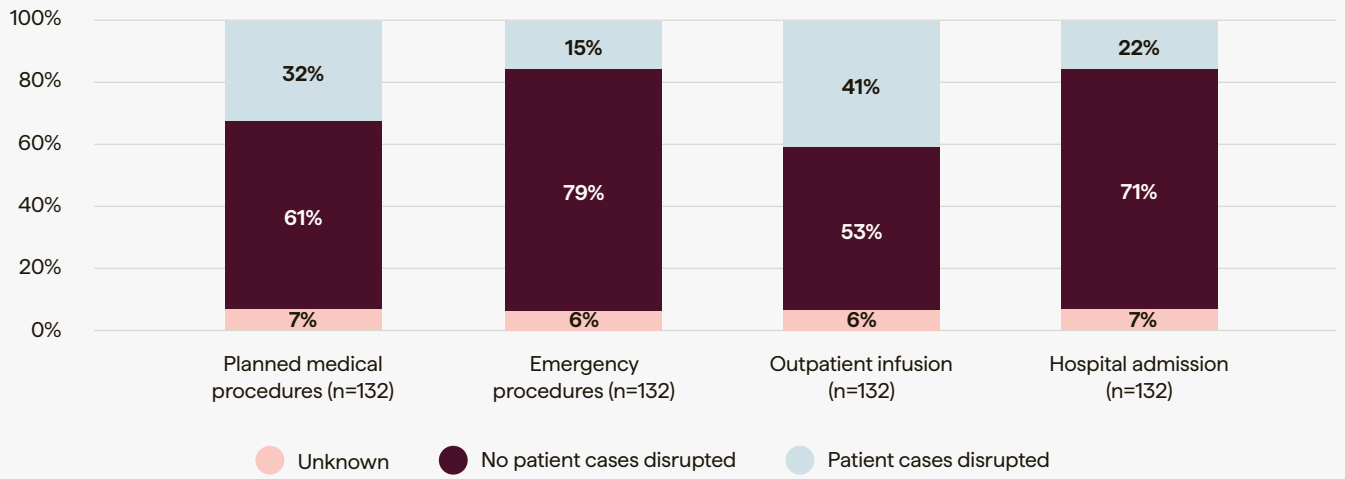
The 2024 survey quantifies that disruption with precision. Outpatient infusion services bore the heaviest burden, with 41% of patient cases omitted, missed, or delayed. Planned medical procedures followed, with disruptions in 32% of cases, hospital admissions at 22%, and emergency procedures at 15% (Figure 10).

Leading facilities have deployed effective mitigation strategies to protect patient care, including maintaining alternative medication stocks, taking proactive procurement measures, collaborating across organizations to secure supply, deploying second-line agents, and—when necessary—rescheduling patient cases to ensure safe care delivery.

Vizient amplifies those facility-level efforts through a centralized library of drug shortage mitigation strategies, developed from clinical expertise and direct input from client health systems. These strategies translate shared patient management practices across organizations into actionable, proactive guidance providers can deploy during shortage events. As of this publication, mitigation strategies are available for 63 high-priority medications, which represents nearly 20% of our Essential Medications List and covers many of the most frequently impacted drugs.

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Figure 10. Percentage of patient case disruptions due to drug shortages



Drug shortage resources and strategies

Identification and mitigation resources

Facilities draw on a broad ecosystem of resources to identify and track drug shortages, including the American Society of Health-System Pharmacists (ASHP), FDA, wholesalers and distributors, group purchasing organizations (GPOs), manufacturer communications, 503B offerings, and internal systems. Professional organizations, industry newsletters, and peer networks round out the intelligence landscape.

Survey respondents consistently identified our assurance programs as essential resources in shortage response, specifically citing the NES programs for their role in preserving access to critical and emergency-use medications when traditional supply channels fall short. These programs enable facilities to maintain care continuity and avoid disruption during high-impact shortages.

These resources deliver actionable intelligence across the full spectrum of shortage management, from allocation visibility and availability tracking to effective mitigation execution.

Mitigation strategies span a wide range of approaches:

- Identifying alternative medication options
- Implementing inventory conservation measures
- Executing operational changes
- Establishing clinical restrictions
- Creating situation, background, assessment, recommendation (SBAR) documents
- Making informed formulary decisions
- Modifying electronic health records (EHR) and storage systems
- Engaging key stakeholders in consultation
- Fostering collaboration across clinical and operational teams
- Leveraging industry and government recommendations

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Mitigation strategies involving technology and novel resources

Technology is a frontline tool in shortage management. Survey respondents most frequently cited platforms that track medication usage, inventory, and availability across their health systems. Inventory optimization features—including par level management, expiration date monitoring, and predictive analytics that leverage historical and real-time data to anticipate future medication needs—are in active use across facilities. Many organizations also rely on applications and platforms that provide notetaking, spreadsheet, and team collaboration functionality to document, track, and manage shortages in real time.

Significant gaps or needs regarding assistance for drug shortages

Table 4 identifies the critical areas where facilities need more support to combat drug shortages, including communication, supply management, and mitigation strategies. Despite established channels and tools for information sharing, communication failures rank as the most significant gap. Facilities need earlier, more transparent notification such as intelligence about specific shortages before a procurement decision is already overdue. A more proactive communication posture from wholesalers and suppliers directly strengthens providers' ability to deliver optimal patient care.

Table 4. Gaps regarding assistance for drug shortages

Category		Percentage of respondents (n=132)
Communication	Earlier and more transparent notice	33%
	Accurate product release dates	27%
Supply management	Better wholesaler management of allocations	12%
	Increase medication production	17%
	Supply chain and gray market oversight	10%
Mitigation strategies	Shortage management software or predictive modeling	17%
	Resources for mitigation (e.g., labor, time, finances, information)	9%

Regarding supply management, respondents identified clear priorities: better allocation management by wholesalers, increased medication production, and stronger oversight of the supply chain and secondary distributors. Strategic, equitable allocation plans, particularly for pediatric drugs, would directly reduce patient care disruptions. Tighter supply chain oversight eliminates the artificial demand spikes that routinely exacerbate shortages. Providers remain frustrated by secondary distributor interactions, driven by legitimate medication safety concerns and their inflated prices.

Respondents put forward concrete solutions for strengthening mitigation strategies, including:

- Shortage management software
- Incorporation of artificial intelligence
- Dedicated staff resources to handle drug shortages
- Improved, timely communications and greater transparency

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Those solutions extended to systemic and regulatory levels. Many respondents called for greater government involvement in addressing drug shortages, including requiring the FDA to mandate regular manufacturer updates with projected shortage resolution timelines. Others pressed for higher-frequency shortage reporting to accelerate awareness. Several proposed deploying distributor and purchasing data to detect early shortage signals and enable proactive response planning. Additional priorities included implementing a national drug supply tracking system, restricting unauthorized third-party vendors from compounding shortages, and incentivizing manufacturers to sustain production of critical medications.



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Recent advancements by Vizient

We have made significant, measurable progress in strengthening providers' capacity to manage and mitigate drug shortages. These advancements reflect a multi-dimensional strategy grounded in data-driven insights, strategic collaboration, and forward-thinking frameworks built to support hospitals and health systems nationwide.

A key innovation has been the introduction of drug shortage stewardship—a comprehensive, proactive framework that reframes how drug shortages are addressed both locally and nationally.[10] This stewardship model drives the formation and enhancement of drug shortage committees, promotes responsible mitigation strategies, and actively discourages inappropriate protective purchasing. It leverages regional networks to sustain medication access across communities and accelerates a cultural shift toward better stewardship of essential medications, which empowers systems to evaluate utilization and expand overall access.

To support implementation of these principles, Vizient launched a revamped **Essential Medications List** in 2024, now enhanced with two critical insight components: demand planning and market resiliency.[11] These features equip providers to anticipate risk and act early embedding data-informed decision-making across the supply chain. Notably, 60% of the molecules in the updated Essential Medications List are covered within our Generic Injectable Program, reinforcing strong alignment between clinical priorities and strategic sourcing.

We also convened a national drug shortages key performance indicator (KPI) workgroup in 2024, bringing together our subject matter experts and providers to create a **standardized set of KPIs.**[12] These metrics give pharmacy leaders and health system executives the actionable data needed to quantify the clinical, operational, and financial impact of shortages, which strengthens the case for mitigation infrastructure investment and sharpening resource allocation decisions.

Additionally, our internal infrastructure matches the scale of the challenge. Since 2018, the Drug Shortage Mitigation Group, comprised of 11 hospitals and health systems, has provided ongoing advisement on mitigation strategies.[13] Since the 2024 survey launch, 23 new mitigation strategies have been developed and added to our library, bringing the total to 63 available strategies as of this publication. These advances build on the foundation established by our **2019 Drug Shortages Survey,** which first quantified the financial and labor burden shortages placed on hospitals nationwide. Since then, Vizient has deepened its proactive mitigation capabilities, including the Pediatric Drug Shortages Project developed in collaboration with the Children's Hospital Association (CHA).[14] That project directly addressed the disproportionate impact of shortages on pediatric facilities, a finding further validated in the 2024 survey. In 2023, we expanded internal capacity with the Shortage Surveillance and Readiness Team—a 20-person, cross-functional group spanning 10 business units that streamlines surveillance, communication, and mitigation efforts, positioning us to respond rapidly to emerging shortages.



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The results of these commitments are concrete. Since 2021, the NES programs have scaled significantly, generating additional manufacturer inventory of critical medications and strengthening supply chain resilience. Approximately 63% of 2024 survey respondents actively participate in these programs—confirming widespread adoption and alignment with improved access. Data from the Vizient Advanced Access Hub (VAAH) program between 2023 and 2025 documents a dramatic increase in accessed units of over 5,000%. Bupivacaine/epinephrine, sodium bicarbonate, and carboplatin—three of the highest-impact drugs identified in the 2024 survey—have collectively accounted for more than 700,000 accessed units since 2023. These medications represent three of the five most accessed products within our NES programs. That surge in demand was met through NES program collaboration with suppliers to create additional supply—delivering real, measurable impact for providers navigating ongoing shortages.

These advancements reflect the Vizient commitment to sustainable drug shortage solutions—combining innovation, analytics, and collaboration to build a more resilient, responsive supply chain for the future of healthcare.

The need extends beyond pharmacy. Drug shortages continue to challenge other critical areas of care, including medical and surgical supplies and laboratory resources. Understanding how programs like NES Reserve shape the broader healthcare ecosystem is essential to building more resilient systems. We are actively developing analyses to assess these wider impacts, advancing solutions that support healthcare providers across the full continuum of care.

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The Vizient NES Reserve program has provided us with an additional tool to help combat the many drug shortages that we continue to face. Our health system has utilized the program to request and access supply of essential medications to continue uninterrupted patient care when there are supply issues through our regular distribution channels. We’re excited to continue the partnership and hope to see an expanded list of medications with the NES Reserve program in the near future.

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Appendix

Methods

A structured methodology was employed to conduct a comprehensive survey on drug shortages. In January 2024, a 23-question survey was developed to capture key insights on the issue. The survey underwent pilot testing by staff and pharmacy leaders to ensure clarity and relevance. In April, the survey was distributed via email to 917 Vizient clients, with multiple reminder emails sent to encourage participation and improve response rates. A final request for incomplete responses was sent in September, before the survey officially closed. The collected data was scrubbed to ensure accuracy and completeness. The analysis phase began in October 2024, where insights were drawn from the cleaned dataset to inform conclusions and recommendations.

Vizient resources

There are several notable initiatives and resources to help our provider clients navigate supply chain challenges:

- Novaplus, the industry's longest-running private label program, provides market-leading financial value to providers. The Novaplus Enhanced Supply (NES) program delivers additional pooled manufacturer inventory of both Novaplus private label and manufacturer-labeled essential medications that are critical to clinicians' ability to provide immediate and high-quality patient care. NES Reserve provides a dedicated manufacturer inventory of these essential medications for participating providers. Like NES, the inventory is stored by participating suppliers in the U.S.[15]
- Drug shortage resources, including drug shortage alerts and mitigation strategies designed to assist providers in managing the clinical, operational, and financial challenges of drug shortages.[16]
    - Essential Medications List
    - Drug shortages key performance indicators (KPIs) paper
- Teams, groups, committees, and alliances offer an opportunity for collaboration between subject matter experts to address shortages.
    - End Drug Shortages Alliance
    - Shortage Surveillance and Readiness Team
    - Vizient Provider Customer Drug Shortages Mitigation Group

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Vizient, Inc. provides solutions and services that improve the delivery of high-value care by improving financial sustainability, system performance, and accelerating strategic growth for more than two-thirds of the nation's healthcare providers. Vizient provides expertise, analytics, consulting services, and a contract portfolio representing $156 billion in annual client purchasing volume to improve patient outcomes and lower costs.

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