

CATEGORY RESOURCE GUIDE

Peripheral vascular products and accessories

Included in this document

(Click to view each section)

Market landscape

Manufacturing insights

- Product overview
- Selection factors
- OEM and manufacturing locations
- Raw materials
- Regulatory and approvals
- Non-awarded suppliers

Logistics insights

- Transportation/shipping
- Product storage

Utilization insights

Clinical contract support resources

Building supply assurance

- Potential supply vulnerabilities
- Conservation strategies
- Supply chain programs
- Planning for disruptions

Vizient award overview

Awarded suppliers

MS1001 - B. Braun

MS1002 - Bard

MC1003 - Biotronik

MS1004 - Boston Scientific

MS1005 - Cordis USA

MS1006 - Cardiovascular Systems

MS1007 - Cook Medical

MS1008 - Medtronic

MS1009 - Merit Medical Systems

MS1011 - Penumbra

MS1012 - Terumo Medical

Distribution

Direct



Want to receive weekly Supply Assurance updates?

Update your preferences through our Subscription Manager by selecting Supply Assurance Weekly Digest.

Questions? Contact supplyassurance@vizientinc.com, pharmacyquestions@vizientinc.com, novaplus@vizientinc.com.

DISCLAIMER: THE INFORMATION CONTAINED IN THIS DOCUMENT IS INTENDED FOR INFORMATIONAL PURPOSES ONLY AND IS IN NO WAY INTENDED TO BE A SUBSTITUTE FOR OR IN ANY MANNER TO BE CONSTRUED AS MEDICAL OR CLINICAL ADVICE. VIZIENT IS COMPILING INFORMATION AND EMERGING PRACTICES FROM MEMBERS TO AID IN KNOWLEDGE TRANSFER DURING CRITICAL SUPPLY EVENTS. THE INFORMATION CONTAINED HEREIN HAS NOT BEEN INDEPENDENTLY VERIFIED, RESEARCHED, OR INVESTIGATED AND SHOULD NOT BE CONSTRUED AS ADVICE OR A RECOMMENDATION. DECISIONS REGARDING WHETHER AND HOW TO UTILIZE ANY OF THESE PRACTICES SHOULD BE MADE BY HEALTH CARE PROVIDERS, AT THEIR OWN RISK, WITH CONSIDERATION OF INDIVIDUAL CIRCUMSTANCES. AS INFORMATION IS CHANGING RAPIDLY, VIZIENT ENCOURAGES YOU TO ALWAYS REFER TO THE CDC, YOUR STATE'S DEPARTMENT OF HEALTH, AND YOUR LOCAL PUBLIC HEALTH AUTHORITY FOR GUIDANCE. VIZIENT DOES NOT PROVIDE LEGAL, REGULATORY, OR MEDICAL ADVICE AND DISCLAIMS LIABILITY OR RESPONSIBILITY FOR THE ACCURACY, COMPLETENESS, AND/OR CLINICAL EFFICACY AND SAFETY FOR THE PRODUCTS OR PROCESSES CONTAINED HEREIN. MEMBERS SHOULD SEEK THEIR LEGAL COUNSEL'S ADVICE ON LOCAL, STATE, AND FEDERAL LEGAL/REGULATORY MATTERS.

Making supply uncertainty a thing of the past, not the future

To help members maintain supply assurance for essential products, Vizient shares insights via **category resource guides** on vizientinc.com. These category-specific documents contain comprehensive manufacturing, logistics and utilization insights to help members source supplies with confidence. Category resource profiles are one way we're **building supply assurance together**.

Market landscape

One of the greatest limitations in this market is the pricing pressure that is occurring within the office-based lab (OBL) setting. Although these clinics have led to a significant increase in efficiency, reducing the average time patients are in a hospital, these settings are also incredibly price sensitive. It is typical that there is a 30% discount on devices sold to an OBL, relative to a hospital. As more OBLs continue to be developed, and more procedures continue to be shifted toward this setting, pricing pressure is expected on percutaneous transluminal angioplasty (PTA) balloons, stents, atherectomy devices and associated products for performing routine procedures.

Manufacturing insights

Product overview

These products are used to diagnose and treat blockages of arteries in the limbs:

Peripheral vascular	Description
Drug-coated balloon	This novel device for percutaneous coronary intervention (PCI) has demonstrated a favorable outcome due to its peculiar characteristic of a high-concentration, rapid local delivery of an antirestenotic drug without the use of a durable polymer or metal stent.
Guide wire catheter	The device is used to guide the catheter into place during vascular insertions. The purpose of a guidewire is to gain access to the blood vessels using a minimally invasive technique.
Thrombectomy devices	Intracoronary catheters have a central aspiration lumen through which the thrombus can be extracted. These rapid-exchange devices are passed over an intracoronary guidewire into the spell out IRA in lowercase with IRA in parentheses (IRA).
Introducer sheath	The sheath helps protect or cover the instruments typically used in cardiac surgeries.
Atherectomy devices	The device is designed to remove some amount of plaque or other material from an atherosclerotic vessel.
Embolic protection	These catheter-based devices are used to capture atherothrombotic debris released during percutaneous vascular interventions.
Peripheral stent	The small metal mesh tube keeps the artery open.

Selection factors

Dependent on physician specialty

OEM and manufacturing location

Varied

Raw materials

- Guidewires- stainless steel
- Hyten stainless steel
- MP35N
- Nitinol
- Resin
- Polymer
- Plastic
- Metal

The lastest manufacturing insights are available here.

- Platinum
- Stainless steel
- · Nitinol (combination of nickel and titanium
- Cobalt-chromium
- Tantalum
- Niobium
- Nickel
- Titanium

Regulatory and approvals

The following agencies have granted approvals:

- U.S. Food and Drug Administration (FDA)
- Occupational Safety and Health Administration (OSHA) guidelines
- Centers for Disease Control and Prevention (CDC)

Search Centers for Medicare & Medicaid Services (CMS) for "local coverage determination" or "LCD" and "national coverage determination" or "NCD" articles, quality safety and oversight, and other topics.

Non-awarded suppliers

· Angiodynamics: thrombectomy

· Gore: stent grafts

· Abbott: vascular/stents, catheters, closure devices, balloons

· Cardiva: closure device

• Argon Medical: imaging devices

Logistics insights

Transportation/shipping

Shipping

Product is typically shipped via freight management such as FedEx or UPS.

- · Air, Baltimore
- Chicago
- Indianapolis, Ind.
- Los Angeles
- Memphis
- New York
- Philadelphia
- · Vessel, Baltimore
- · Eddystone, Pa.
- · Long Beach, Calif.
- Los Angeles
- Memphis
- New York
- Philadelphia

Distribution

- · Alameda, Calif.
- Salt Lake City

Days to process

One to two weeks

Products/raw materials are manufactured/sourced globally.

And products are not typically distributed.

See additional freight update here.

Product storage

- Shelf life is three to five years.
- Storage is in a cool, dry place.

Utilization insights

Clinical contract support resources

None

Building supply assurance

Potential supply vulnerabilities safeguards

Apply clinical-supply integration.

Review and align physician preference cards.

Standardize equipment and compare the cost of the same procedure between different specialties.

Have regular conversations with physicians on what their costs are for certain procedures.

Conservation strategies

Because predicting the next supply shortage is impossible, it is important that healthcare providers not only adopt and implement care practice strategies to conserve critical products and supplies, but it is equally as important to sustain leading practices that will help ensure the availability of essential products post recovery and in the future. For example, some hospitals have reported decreasing their IV solution use by as much as 50% in some care areas by continuing to adhere to the conservation strategies implemented during the recent shortages.

Additionally, with other products and services:

- · Assess and identify all hospital services.
- Identify and list critical products, supplies, and resources required to sustain operation of those areas identified and ranked in the first step.
- Maintain the internal planning team document with accurate information. Review and update the document on a routine basis with current employee contact information. If a team member no longer works in the organization, identify the replacement and communicate the information to all stakeholders.
- Communicate practice changes and procedures frequently to staff and stakeholders.
- Hold regularly scheduled planning meetings in the absence of a supply chain shortage or event. This will help to ensure that
 identified processes and protocols remain relevant and any issues requiring revisions and/or updates are addressed in
 advance of a shortage or disaster.

If your organization has implemented conservation strategies for peripheral vascular products, or any other category, share your information here. The information you share will be anonymous unless you grant Vizient permission to share.

Supply chain programs

None

Planning for disruptions

Distributor recommendations

Build strong relationships with key distribution partners, confirm that distributors are doing contract refreshes regularly to confirm that pricing and products are accurate. The contracted suppliers send updates every 24 hours to distribution channels to ensure members are accurately positioned.

Vizient offers the following best practices to help members manage disruptions. These suggestions are available to help you gain insight on how the industry is managing supply challenges.

If your inventory is low

Vizient is committed to bringing hospitals, manufacturers, distributors and the industry together to talk about this issue and any long-term implications. We feel continued dialogue around the issue by experts – hospitals, manufacturers, distributors and industry – will be crucial to ultimately arriving at a solution to vexing issue. During critical supply periods, members should continue to order their normal levels of products in order to ensure continued availability for all institutions.

If you begin to experience a shortage:

- Evaluate your current supply.
- · Contact your local supplier representative and report exactly how many days' supply you have left.
- If you are not getting a response from suppliers, contact Vizient so we can facilitate communication between member and supplier; provide whether you are ordering direct or through distribution (med/surg or pharmacy), and indicate supplier and distributor (if applicable) when you contact Vizient.
- We encourage you to continue the conversation within your organization, with your peers and with the manufacturers and distributors to identify ways to manage your ongoing needs.
- Submit inquiries to disasterresponse@vizientinc.com.

Expedite supply resolution

To expedite resolution for supply issues, contact your local supplier and provide the following information:

- The description and item number of the product that is experiencing a shortage
- · Whether you are purchasing directly or through an Authorized Distributor
- Days' supply remaining in your inventory

If expanding your facility

We suggest members notify suppliers when expanding their facilities to assist in planning and anticipate increases in allocations. You should consider notifying your suppliers of at least three months ahead of the completion of your facility to ensure sufficient capacity.

Building supply assurance together

Collaboration among suppliers, distributors, members and Vizient strengthens the assurance of supply for all stakeholders. Our wealth of experience, actionable data and predictive planning helps to strengthen supply assurance. Further, our work with stakeholders focuses on improving supply chain risk mitigation as we collaborate to enhance data, increase supply visibility and expand inventory access.

Four themes keep us centered and are the pillars of our supply chain assurance efforts: insights, access, enablement and advocacy. Learn more about our supply assurance strategy.

In the event of a supply disruption, Vizient will publish a product disruption brief to the Supply Assurance webpage. Curated by Vizient experts, these documents provide a summary of current conditions and strategies to manage product-level disruptions.

In addition to our disruption briefs, Vizient also compiles all known disruptions into the monthly Supply Update Executive Summary which tracks all supply chain disruptors, including current market challenges, category-specific product updates and recovering markets.

Whether a supply disruption is the result of a natural or human-made disaster, it is imperative that members are informed. The Vizient Disaster Preparedness webpage was developed to help providers meet supply chain needs before, during and after an event. The Supply Update section of the guide is updated on a frequent and routine basis with communication from all awarded suppliers that have manufacturing facilities in areas impacted by a disaster. Additionally, a status update list of those manufacturers whose operations have been affected, as well as a list of impacted product(s), will be maintained and updated as that information is received from a supplier.

The importance of an internal planning team

Identifying an internal planning team is imperative to managing supply, mitigating risks and sustaining operations during a supply shortage. According to the Supply Chain Disaster Preparedness Manual developed by the CDC, internal teams should consist of representatives from supply chain, purchasing, emergency management, each clinical/care delivery area, inventory staff, receiving and distribution staff. Relative to medication and solutions, Vizient member feedback indicated the pharmacy department as an integral member to the internal team, as clinical/pharmacy practice changes may occur. Additional members may include the facilities safety manager, security, risk management, legal, marketing and communications, and public relations.

A simple internal team planning document will help to identify, contact and quickly convene relevant team members. See the sample below:

Name	Title	Department/role	Phone	Email

Once an internal team is identified, additional considerations before beginning the development and implementation of a recovery plan include the following:

- The team's goals
- · The responsibilities of each planning team member
- · Other department/team members who may need to be involved
- Frequency of team meetings
- How the goal/mission be accomplished
- How information will be documented and communicated to the broader audience
- · A current framework for success either within your facility or from a leading organization

Stakeholder communication

During supply chain product disruptions, it is vital that accurate and timely information is disseminated to internal and external stakeholders. The following actions should be considered in an effort to facilitate and ensure informed decisions:

- Designate the point person or persons who will be responsible for developing, disseminating and monitoring all communications coming from the internal planning team.
- The internal planning team should collaborate key messages/information to stakeholders, such as changes in policies and/or practice changes.
- Clearly communicate the roles and responsibilities of all staff based on the agreed upon recovery plan. If there are changes
 to the plan at any time, timely communication of those changes will help to increase risk mitigation and minimize interruption
 of patient care.
- Establish communication mechanisms for information exchange. Examples include but are not limited to regularly scheduled briefings and meetings, in-services, staff trainings, live/recorded webinars, memos and emails.
- Determine the frequency of reminders and updates regarding supply disruption status and anticipated resolution.
- Frequent updates and reminders after a supply disruption has been mitigated or eliminated help to ensure ongoing success and sustainability of best practices.

Supply management and logistics

A leading practice identified in managing recent shortages is a centralized management approach of impacted product codes. A key responsibility of the internal planning group is to identify all affected product codes and to determine the amount of supply on hand, expected and any allocation protocols implemented by the supply source. Once the current product status is determined, the following actions are recommended:

- Update and maintain an accurate inventory list. Each care area that utilizes any product code on the inventory list should identify a point person to collect on hand and usage levels on an agreed upon frequency. That information should be reported back to the internal planning team. Inventory can either be managed by care delivery areas or in a centralized manner.
- Identify space in the facility to store, manage and distribute product. Designate authorized personnel responsible for maintaining the inventory (expiration dates temperature, ventilation, utilization, equipment maintenance and repair, etc.).
- Develop and seek approval for the inventory management protocol and communicate this information to all stakeholders.
- Update and maintain accurate purchase order and allocation protocols from the contracted supplier and your group purchasing organization (GPO).
- Update and maintain accurate emergency contact information for all suppliers as well as internal stakeholders. This process should be done at least every six months.
- Review the inventory management status on an agreed upon frequency with the internal planning group. Assess for barriers to its effectiveness, implement any changes necessary and communicate those changes to all stakeholders.

Planning for all levels of care and ancillary products

Feedback from lessons learned indicated the need to include all levels of care and ancillary products, if applicable, in the conservation plan. If your provider system has children's hospitals, ambulatory surgery centers, outpatient clinics and/or long-term care facilities, utilization and logistics of products and supplies must be incorporated into the plan. Additionally, it is vital that ancillary products are considered when contemplating allocations and purchase orders. For example, during the recent drugs and solutions shortages, as large volume solution bags went on back order, smaller volume bags, compounding products, and syringes also went on back order because of practice changes. Therefore, conservation planning should include actual and the additional ancillary products that may be required to sustain a clinical and/or operational practice change



As the nation's largest member-driven health care performance improvement company, Vizient provides solutions and services that empower health care providers to deliver high-value care by aligning cost, quality and market performance. With analytics, advisory services and a robust sourcing portfolio, we help members improve patient outcomes and lower costs.