



CHARME

Collaborative for Healthcare Action
to Reduce MedTech Emissions

2026 PROGRESS REPORT

CONVENED BY



SUSTAINABLE
PURCHASING
LEADERSHIP
COUNCIL

CO-CHAIRLED BY



KAISER PERMANENTE®

vizient®

ADVISED BY


accenture

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Building a Healthier Supply Chain

Two years ago, CHARME was born from a shared understanding that the healthcare supply chain represented both a significant source of emissions and an opportunity for meaningful, systemic change. What we could not have foreseen was how much this collaborative would teach us about what is possible when organizations that compete in the market choose to innovate together.

We recognize that reducing the health sector's contribution to greenhouse gas emissions is essential to prevent worsening climate events and their disruptions to care delivery. Medical devices and supplies account for 7% of U.S. healthcare emissions, yet this segment of the supply chain lacked for collaboration. We saw a gap, and we filled it, not with a pledge or a policy statement, but with people, partnerships, and practical action.

In our first two years, our workstreams have moved from understanding problems to building solutions: field-tested playbooks for single-use device reprocessing, a toolkit for transitioning to launderable isolation gowns, guidance on integrating bioplastics into healthcare packaging and products, and a renewable energy project exceeding one million megawatt-hours.

Equally important is what we have built in the spaces between workstream meetings: a genuine forum for providers and suppliers to understand each other's operations, constraints, and missions—all within a framework of rigorous antitrust safeguards. That kind of knowledge is the foundation for optimizing cost, sustainability, and reliability across the entire supply chain. We are grateful to every health system, supplier, distributor, GPO, and NGO partner who has invested time, expertise, and leadership in this work.

We enter our next phase with that foundation in place and with an ambitious agenda ahead. New workstreams are focused on circularity, packaging, and transportation and logistics. New participants are joining. New pilots are launching. And the collaborative model we have tested and refined over two years is ready to scale.

This report shares the story of what we have accomplished and points toward what comes next. Our progress signals that the work of building a healthier, more resilient healthcare supply chain is well underway.



Steven Chyung, Senior Vice President and Chief Supply Chain and Procurement Executive, Kaiser Permanente



Cristina Indiveri, VP of Core Tenet Programs, Vizient Inc



Becka DeSmidt, Program Director, Sustainable Purchasing Leadership Council

¹ Agency for Healthcare Research and Quality. (2022). Reducing Healthcare Carbon Emissions. <https://www.ahrq.gov/sites/default/files/wysiwyg/healthsystemsresearch/decarbonization/decarbonization.pdf>

CHARME Participants & Partners

40

Organizations

150+

Active Participants

>\$1.1T

Annual Revenue Represented

280+

Hospitals

6,400+

Sites of Care

5

Active Workstreams

Convened by:



Co-Chaired by:



vizient.

Advised by:

accenture

Key Supporters



BD

cencora



GE Healthcare



HENRY SCHEIN®

McKesson

stryker

Participating Organizations

Advent Health



Allina Health

Ambu



ARJO

Baxter



Boston Scientific



HPRC
HEALTHCARE PLASTIC RECYCLING COUNCIL



Medtronic



Memorial Sloan Kettering
Cancer Center

NATIONAL ACADEMY OF MEDICINE



PHILIPS

Providence

RUSH



solventum



Anti-Trust Policies & Practices

CHARME is committed to free and healthy competition and full compliance with all applicable antitrust and competition laws. Participation in CHARME, including all meetings, side discussions, and shared information, is contingent on understanding and adhering to this commitment.

CHARME does not discuss, recommend, or agree on prices, margins, bids, customer or supplier allocation, production or purchasing volumes, contract terms, supplier selection, or other competitively sensitive business strategies, nor does it set commercial terms or require adoption of any practice.

CHARME provides a compliance-supervised, multi-stakeholder forum where healthcare supply chain stakeholders come together to share nonconfidential sustainability learnings and develop voluntary, noncommercial resources.

Participation in CHARME and use of its resources are voluntary and nonexclusive; each organization independently evaluates costs, sourcing, and implementation, and retains sole discretion over whether and how to adopt any sustainability practice, procurement approach, supplier engagement activity, renewable-energy opportunity, or operational change, based on its own independent business judgment.

All CHARME meetings begin with the following guidance:

Rules of Engagement

Our Commitment to Antitrust

As we embark on our discussions today, it is essential to remind everyone of our required compliance with antitrust laws and regulations. **CHARME is committed to free and healthy competition and to complying with all antitrust and competition laws.**

- 1. No Discussions on Pricing**
Discussions involving current or future pricing, pricing strategies, discounts, or any terms of sale are strictly prohibited.
- 2. No Sharing of Competitive Information**
Do not share or discuss confidential, competitively sensitive information including production capacities, market shares, business plans, or strategies.
- 3. Independent Decision-Making**
Each participant must make independent business decisions and avoid any agreements or understandings that could restrict competition.
- 4. Compliance with Laws**
Always comply with all applicable antitrust and competition laws.

Your adherence to these guidelines ensures a productive and legally compliant meeting. If you have any questions, or if you should perceive any such discussion is occurring, please report your concern immediately to compliance@sustainablepurchasing.org.

Chatham House Rules

- 1. Confidentiality**
Participants are free to use the information received during the meeting, but neither the identity nor the affiliation of the speaker(s), nor that any other participant, may be revealed.
- 2. Encouraging Candid Dialogue**
This approach encourages speakers and attendees to share their insights and perspectives without concern for being quoted or misrepresented outside of this setting.
- 3. Respect for Privacy**
We ask all participants to respect the privacy and confidentiality of their fellow attendees to ensure a trustworthy environment.

These rules help us create a space where innovative ideas and robust discussions on decarbonization can thrive. Thank you for your understanding and cooperation.

CHARME Leadership

CHARME is structured to foster action, shared accountability, and inclusive leadership. The Executive Committee provides strategic direction; the Steering Committee coordinates workstreams and tracks the 24-month roadmap; each Workstream Committee designs and advances practical pilots and projects.

Executive Committee 2025-2026

- Barbra Anderson, VP, Global Corporate Responsibility, Cencora
- Steven Chyung, Senior Vice President, Chief Supply Chain and Procurement Executive, Kaiser Permanente
- Katie Dean, Vice President, Supply Chain Strategy, Programs, and Business, Stanford Medicine
- Donna Drummond, Chief Sustainability Officer, Northwell Health
- Cristina Indiveri, VP, Core Tenets, Vizient Inc
- Maureen Mazurek, Chief EHS & Sustainability Officer, BD
- Emmie Mediate, Chief Program Officer, Health Care Without Harm
- Erol Odabasi, Senior Director, Sustainability, Stryker
- Elizabeth Schenk, Chief Environmental Stewardship Officer, Providence
- Kris Spriano, Vice President of Programs, SPLC (former)
- Robert ter Kuile, Chief Sustainability Officer, McKesson

Steering Committee

- Meredith Edwards, Director of Supply Chain Business Operations, Sustainability and Diversity, Stanford Medicine
- Christy Foster, Director of Sustainability, Stanford Medicine Children's Health
- Kathy Gerwig, Advisor, Health Care Without Harm
- Cristina Indiveri, Associate Vice President, Core Tenet Programs, Sustainability, Vizient
- Nestor Jarquin, Sourcing Manager, Kaiser Permanente
- Jessica Marx, Director and Senior Program Officer, National Academy of Medicine
- Alissa Mathies Tamasi, Senior Program Manager, Supplier Decarbonization, Medtronic
- Steve Oommen, Director, Project Management, Boston Scientific
- Priscilla Ng, Sustainability Manager, Kaiser Permanente
- Casey Paus, Director of Sustainability and Branding, Stryker Sustainability Solutions
- Mike Schiller, Executive Director, AHRMM, American Hospital Association
- Tracy Taszarek, Executive Director, Healthcare Plastics Recycling Council

Program Staff & Advisors

- Becka DeSmidt, Program Director, Sustainable Purchasing Leadership Council
- Cristina Indiveri, VP, Core Tenets, Vizient Inc
- Priscilla Ng, Senior Manager, Impact Spending, Kaiser Permanente
- Liz Swanson, Senior Program Manager, Sustainable Purchasing Leadership Council
- Jessica Wolff, Principal Director, Health Sector Sustainability Lead, Accenture (former)

The Challenge: When Supply Chains Break, Care is at Risk

Climate Disruptions Impacting Patient Care

In January 2025, the Los Angeles wildfires forced hospital evacuations, degraded air quality across Southern California, and strained regional health system capacity at the same moment that supply routes were disrupted. These wildfires forced Kaiser Permanente, Cedars-Sinai, Providence, UCLA Health, and others to close facilities, postpone non-urgent procedures, and brace for emergency surges.

For patients already managing chronic conditions, the consequences were immediate and personal: Kaiser Permanente data showed approximately 35% increases in virtual care-seeking for cardiovascular and respiratory conditions in the week following ignition, while dialysis patients faced clinic closures, home equipment failures, and displacement that put their lives directly at risk.

The effects of Hurricane Helene's landfall in late September 2024 continued into 2025: Baxter International's North Cove, North Carolina plant, which produces a significant portion of the nation's IV fluids, returned to pre-hurricane production levels in February 2025. The disruption highlighted the scale of the recovery effort required following an unprecedented natural disaster and prompted coordinated efforts, including imports from abroad, to support supply continuity and patient care.

Altogether, the U.S. recorded 23 billion-dollar weather and climate disasters in 2025 with a disaster occurring roughly every 10 days, a pace that makes supply chain disruption not an exceptional risk to plan around, but a baseline condition healthcare must be designed to withstand.

CHARME Meets This Challenge

Lowering emissions and building stronger, more durable supply chains is essential to prevent disruption of care delivery, especially during extreme weather events. CHARME's focus on improving resource stewardship, reducing reliance on single-use supplies, expanding renewable energy procurement through the supply chain, and expanding device reprocessing all serve to strengthen the health sector.

² Climate Central. (2025). U.S. Billion-Dollar Weather and Climate Disasters in 2025. Retrieved from <https://www.climatecentral.org/report/us-billion-dollar-weather-and-climate-disasters-2025>

Project Progress

2024–2026 Workstream Outcomes

Product Innovation Workstream

Co-Chair:

Christy Foster, Stanford Medicine Children's Health

Participating Organizations

Ambu, American Red Cross, Arjo, Baxter, Becton Dickinson, Boston Medical Center, Boston Scientific, Cardinal Health, GE HealthCare, Healthcare Plastics Recycling Council, Kaiser Permanente, Legacy Health, Medtronic, Philips, Providence, Stanford Medicine, Vizient Inc

Purpose

The materials used in medical products and packaging contribute significantly to healthcare's carbon footprint and overall waste burden. Finding ways to reduce that environmental impact without compromising clinical performance is one of the most actionable opportunities to advance sustainability, encourage innovation, and build a more circular supply chain.

Rethinking how products are designed, used, and managed at end of life is a worthwhile but complex undertaking. It demands coordination among manufacturers and healthcare providers, and progress is constrained by the absence of shared frameworks, inconsistent lifecycle emissions data, and insufficient infrastructure for material recovery and circularity.

The workstream formed three teams to address this challenge: mapping sources of emissions in the manufacturing, delivery, use, and disposal of medical devices and supplies; investigating lower-carbon materials for packaging and products; and exploring opportunities in end-of-life infrastructure. These resulting guidance is voluntary, non-exclusive, and supports independent product, packaging, and purchasing decisions among CHARME participants.



Product Innovation Workstream

Accomplishments

Value Chain Emissions Visual

Designed a visual guide of emissions hotspots through the MedTech product life cycle to equip decision-makers with insights on where they can wield influence to lower carbon.

End-of-Life Infrastructure

Explored material recovery facility infrastructure to expand capacity for waste diversion.

Bioplastics Guidance Document

Published a practical guidance document co-authored by 10 leaders from health systems and MedTech companies describing the potential to integrate bioplastics as a low-carbon alternative to fossil-fuel-based plastics in health care packaging and products.

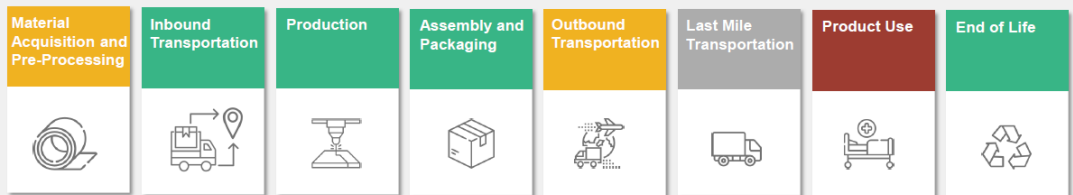


MEDTECH LARGE EQUIPMENT VALUE CHAIN: EMISSIONS INTENSITY

Emissions Intensity:

% of total product footprint emissions

High: >30% Medium: 11-30% Low: 0-10% Variable



Stakeholder Influence, Level of Control:

Stakeholder has direct management of value chain stage

Stakeholder can affect decisions

Stakeholder's ability to affect decisions is minimal

Regulator	CONTROL	LIMITED INFLUENCE	NO INFLUENCE
Upstream Supplier	INFLUENCE	CONTROL	INFLUENCE
MedTech Supplier	NO INFLUENCE	INFLUENCE	CONTROL
Customer	NO INFLUENCE	CONTROL	
Distributor	NO INFLUENCE		CONTROL
Waste Contractor	INFLUENCE		

What's Next

The workstream is turning its focus to circularity in products and packaging, laying the groundwork for pilots to recycle materials such as nitrile gloves; sharps; personal protective equipment such as masks, gloves, and booties; and operating room plastics.

Product Durability Workstream

Participating Organizations

Cardinal Health, Health Care Without Harm, Henry Schein Inc, Kaiser Permanente, Northwell Health, Philips, Providence, Stanford Medicine

Purpose

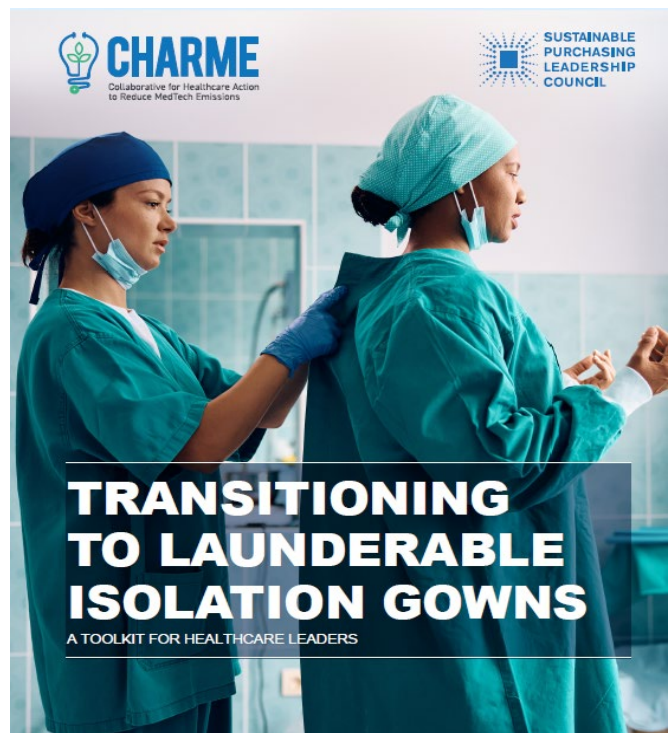
Disposable items consumed and discarded each year in the course of care delivery generate substantial waste and emissions. Shifting to durable alternatives reduces both environmental impact and operating costs, without sacrificing clinical quality or patient safety. Despite broad agreement among health systems on the value of durable products, the transition remains a significant operational challenge, requiring alignment across clinical, supply chain, infection prevention, and sustainability functions and coordinated effort among stakeholders to redesign workflows and establish new procurement and processing practices.

Accomplishments

Seventeen workstream participants co-authored a practical toolkit to help healthcare leaders navigate the shift from disposable to launderable isolation gowns. The resource includes cost and carbon modeling, implementation guidance, strategies for engaging key stakeholders, and more – all illustrative, voluntary tools that organizations may adapt based on their own clinical, operational, financial, and contracting circumstances.

Results

Three health systems—Northwell Health, Providence, and Stanford Medicine—successfully led pilots of launderable gowns and are now expanding the transition to additional facilities, achieving cost and emissions reductions. Life cycle analyses validate their results: one comprehensive study found that launderable gowns generate 64% less energy use, 66% fewer greenhouse gas emissions, 83% less water consumption, and 84% less solid waste per use relative to disposable alternatives.



Product Durability Workstream

"Moving away from single-use disposables toward durable, reusable supplies isn't just an environmental imperative; it's a smarter way to run a resilient supply chain. Our pilot of launderable isolation gowns proved that we can reduce waste and achieve savings without compromising the quality or safety of care. We're proud to be scaling that success across our sites and sharing lessons learned through CHARME."

— Katie Dean, Vice President of Supply Chain Strategy, Programs, and Business, Stanford Medicine



What's Next

The workstream is investigating a second opportunity for resource stewardship: reducing the waste of “zero-use” supplies that are brought into a patient room and discarded without ever being opened or used. Partnering with infection prevention colleagues and engaging clinicians to redesign workflows and safely restock unused, unopened products can save hundreds of thousands of dollars each year.

Case Studies: Launderable Isolation Gowns

Northwell Health

New York · 28 hospital system · Pilot site: Cohen Children's Medical Center · AAMI Level II gown

Lessons Learned

- C-suite buy-in first: Senior leader endorsement unlocks resources and resolves barriers
- Start low-volume: Establish proof-of-concept in a lower-acuity unit before scaling up
- Explore rental options: Textile and laundry vendor partnerships reduce capital outlay
- Solve storage early: Launderable gowns are bulkier and require redesign of dispensing and shelving systems

Anticipated Results

- 480,169 kg CO₂ saved per year, equivalent to driving a car around the Earth 49 times
- 309,649 kg less waste per year
- 161,648 kg water saved per year

Providence Willamette Falls Medical Center

Oregon City, OR · 143 beds · 1,200 staff · 100,000 patients/year · AAMI Level II gown

Implementation Approach

- Pitch leadership: submitted an SBAR to make the case for transition
- Design workflow: 30 gowns/day/unit stocked by EVS; laundered at 160°F for 25 min; tagged & scanned to track lifecycle
- Engage staff: safety huddles, newsletters, and rounding
- Evaluate impact: continuous HAI monitoring and cost/emissions tracking via Providence's scorecard

Results

- 95% waste reduction
- 30% reduction in energy & CO₂
- 40% reduction in water usage
- No increase in HAIs
- ~2,000 disposable gowns avoided weekly

Providence St. Patrick Hospital

Missoula, MT · Regional Level II Trauma Center · AAMI Level II gown

Strategy & Implementation

- Purchased 300 3XL gowns for inclusive sizing across all body types
- Relocated launderable gowns to default on isolation carts
- Reduced disposable gown stock and added hooks for dispenser bags
- Placed educational signage directly on isolation carts at point of care

Results

75% savings per-use of launderable gowns (\$1.50 disposable → \$0.37 launderable, including laundering costs)

● PROJECT PROGRESS

Stanford Medicine

Stanford Health Care, Stanford Medicine Children's Health, and Stanford Health Care Tri-Valley

Stanford Medicine Enterprise Transition to Launderable Isolation Gowns

Stanford Health Care launched an enterprise-wide transition from disposable isolation gowns to launderable alternatives across SHC, SMCH, and SHC Tri-Valley. The opportunity was significant: the enterprise used over 1.5 million disposable isolation gowns annually.

Originating from physician-led efforts championed by Sustainability and supported through Supply Chain-led implementation planning, the initiative progressed through entity-specific pilots, feedback assessments, workflow refinement, and infection prevention review before expanding across Stanford Medicine.

A multidisciplinary team spanning physicians, Environmental Services, Sustainability, Infection Prevention, and Supply Chain redesigned workflows and drove adoption while maintaining clinical quality and operational effectiveness. Enterprise deployment is nearing completion across all participating entities.

Implementation Approach

- Multi-year physician-led evaluation, entity-specific pilot testing, and stakeholder feedback analysis that informed enterprise-wide implementation
- Cross-functional governance spanning Supply Chain, Sustainability, EVS, Infection Prevention, and clinical leadership to support enterprise adoption
- Structured education, training materials and workflow redesign
- Phased deployment across SHC, SMCH and SHC Tri-Valley

Lessons Learned

- Strong physician and frontline clinician engagement was critical to program success, helping drive education, adoption, and workflow integration at the unit level. Combined with operational alignment and phased deployment, this approach created a scalable model for reusable product adoption across Stanford Medicine.

Results

- 60-75 tons (1.5M Gowns) of annual waste diversion
- Greater than 60% reduction in carbon emissions and 45% net reduction in total lifecycle water use
- Meaningful annual cost savings over disposables and reusable supply enhances resilience
- Post implementation survey showed overwhelming clinician support of launderable isolation gowns
- AAMI Level 2 reusable gowns designed for approximately 75 laundering cycles
- Framework established for future durable-product initiatives

Single-Use Device Reprocessing Workstream

Co-Chairs: Casey Paus, Stryker Sustainability Solutions
Nestor Jarquin, Kaiser Permanente

Participating Organizations

Allina Health, Arjo, Cardinal Health, Health Care Without Harm, Innovative Health, Kaiser Permanente, Memorial Sloan Kettering Cancer Center, Northwell Health, Solventum, Stanford Medicine, Stryker, Vizient Inc

Purpose

Single-use device reprocessing is a well-established strategy for health systems looking to reduce waste, cut purchasing costs, and lower the environmental footprint of medical device use, delivering both sustainability and financial benefits.

Hospitals discard thousands of single-use medical devices (SUDs) every day, generating substantial waste, cost, and carbon emissions. Many of these devices can be safely reprocessed, extending product life and reducing environmental impact without sacrificing quality or safety. Even so, many health systems encounter obstacles to getting started or scaling up. Limited awareness, unclear policies, and complex contracting requirements are common barriers. Building or growing a reprocessing program requires alignment among clinical teams, infection prevention, and procurement.



Image source: Innovative Health

Single-Use Device Reprocessing Workstream

“Single-use device reprocessing is one of the clearest examples of how hospitals can reduce both cost and environmental impact without compromising care. The CHARME work is important because it recognizes that hospitals and reprocessors both have a role to play in improving these programs. Multi-stakeholder collaboration is exactly what healthcare needs right now, and CHARME is helping establish the models and best practices that can make healthcare more sustainable and more resilient.”

- Lars Thording, Senior Vice President, Marketing and Public Affairs, Innovative Health

Accomplishments

The CHARME workstream developed a comprehensive SUD reprocessing playbook to offer guidance on overcoming common challenges to expanding single-use device reprocessing.

The playbook was co-authored by eighteen experts and practitioners from reprocessing companies, healthcare organizations, and leading NGOs.

It features relevant regulatory and clinical considerations, the cost savings and emissions reduction potential of reprocessing, implementation guidance, and case studies from health systems that have successfully built reprocessing programs.



What's Next

The workstream will meet to exchange lessons learned, test strategies from the playbook, and share metrics that demonstrate program growth.

Case Studies: Single-Use Device Reprocessing

Memorial Sloan Kettering Cancer Center

New York · Main hospital + 16 outpatient sites

Memorial Sloan Kettering Cancer Center (MSK) has operated a single-use device reprocessing program since 2013, concentrating on non-invasive devices across nearly two dozen product types. In 2024, repurchasing reprocessed devices, including SCD sleeves and ECG lead wires, avoided \$232K in purchasing costs. The program's current priority is expanding into reprocessed pulse oximeters, following a successful pilot in the anesthesia department.

The pilot was designed to achieve clinical buy-in. Before the trial began, the team partnered with the reprocessor to produce a short educational video for anesthesia staff covering what reprocessed devices are, how they look, and how to use them. Over one week, 100 devices were placed in selected operating rooms, and staff were invited to submit feedback via a QR-linked form on anesthesia machines. With nearly 40 responses and strong results, the team brought the findings to MSK's value analysis committee and received approval for full implementation.

The choice to start with anesthesia was deliberate, as the department had a clear need for pulse oximeters and an established openness to sustainability efforts. Peer validation proved especially effective: when clinicians heard from colleagues that reprocessed devices performed comparably to new ones, confidence grew.

Case Studies: Single-Use Device Reprocessing

Stanford Medicine

Stanford Health Care, Stanford Medicine Children's Health, and Stanford Health Care Tri-Valley

Stanford Medicine Builds an Enterprise Remanufacturing Program

Supply Chain developed a comprehensive remanufacturing strategy to reduce waste, lower costs, strengthen supply chain resilience, and advance circularity. The organization evaluated approximately 20+ product categories. Phase 1 implementation launched collection of all devices and focused on non-invasive device buy back. With remanufacturing pathways established across the enterprise, Phase 2 invasive-device opportunities have received approval from Value-Based Management (VBM) and Infection Prevention, with pilot planning currently underway for implementation.

Implementation Approach

- Enterprise-wide RFP and category assessment was conducted by Supply Chain team
- Collection programs implemented across more than 20 product categories
- Phase 1 non-invasive buy-back implementation across Air Transfer Devices, SCD Sleeves, ECG Leads and tourniquet cuffs. Phase 2 is under planning for invasive categories such as suture retrievers, arthroscopic shavers and surgical ablation electrodes
- Supply Chain built a comprehensive remanufacturing strategy in partnership with Sustainability, Infection Prevention, clinicians, and operational stakeholders

Results

- Approximately 500 tons diverted from landfill annually
- More than 25% lower emissions than newly manufactured equivalents
- Significant financial savings opportunity and reusable supply enhances resiliency
- Scalable foundation for future invasive-device expansion

Lessons Learned

The program's success was driven by strong collaboration among Supply Chain, physicians, clinicians, Value-Based Management (VBM), and Infection Prevention. Through coordinated stakeholder engagement, frontline education, and governance, Stanford Medicine successfully implemented remanufacturing programs across four entities and more than 20 product categories enterprise wide. Clinician champions were instrumental in building confidence, validating opportunities, and supporting adoption at the point of care. This established a strong foundation for expanding circular supply chain initiatives and advancing Phase 2 invasive-device remanufacturing opportunities.

Renewable Energy Workstream

Lead:

Erol Odabasi, Stryker

Participating Organizations

BD, Cencora, GE HealthCare, Legacy Health, Mayo Clinic, McKesson, Memorial Sloan Kettering Cancer Center, Philips, RUSH, SSM, Stryker

3

Purpose

Energy accounts for more than 90% of Scope 1 and 2 emissions in healthcare. Many organizations want to pursue renewable energy through Virtual Power Purchase Agreements (VPPAs) but lack the expertise, energy demand, or internal resources to evaluate renewable energy opportunities with technical, financial, and legal support. Together, CHARME participants represented over \$1M MWhs of energy demand, which presented a significant opportunity to bring a large-scale renewable energy project on the grid.

A dozen leaders involved in CHARME's Renewable Energy Workstream began with a rigorous selection process to identify an advisor, selecting SE Advisory. The group progressed through cohort formation, comprehensive education and stakeholder engagement, shortlisting of projects, financial modeling, and identification of top projects. Participation is voluntary and each organization in the cohort makes independent decisions on committing to the VPPA.



3 Abel A, McCannon Joseph, Boyden H, Keroack J, Lichter K, Bole A, Balbus J. National Academy of Medicine Perspectives. (2024). Emissions Disclosures and Energy Use Reporting by Hospitals in the United States. Retrieved from <https://pmc.ncbi.nlm.nih.gov/articles/PMC11875545/>

Renewable Energy Workstream

Path to the VPPA

- 1 Advisor Selection: a dozen workstream leaders ran a rigorous process and chose Schneider Electric & SE Advisory
- 2 Education: the cohort built shared technical and market expertise on VPPAs
- 3 Cohort Formation: stakeholder engagement brought participants into alignment
- 4 Project Shortlisting: candidate renewable energy projects identified and narrowed
- 5 Financial Modeling: thorough modeling tested feasibility and project terms
- 6 Project Selection and Term Sheet Finalization: the cohort is preparing in summer 2026 to finalize terms with the developer

What's Next

CHARME health systems, suppliers, and distributors will continue working together and with SE Advisory to identify strategic renewable energy procurement opportunities — potentially expanding participation to strategic suppliers across the value chain.

Sustainable Procurement Workstream

Co-Chairs: Alissa Mathies Tamasi, Medtronic
Steve Oommen, Boston Scientific

Participating Organizations

Baxter, BD, Boston Medical Center, Boston Scientific, Cencora, Henry Schein Inc, Kaiser Permanente, Philips, Solventum, Stanford Medicine, Stryker, Vizient Inc

Purpose

Scope 3 emissions—those generated by suppliers, contract manufacturers, logistics partners, and other value chain participants—typically account for the vast majority of a MedTech company's total carbon footprint. This is especially true given the complexity of medical device and diagnostics supply chains, which span raw material extraction, component manufacturing, specialized contract manufacturing, packaging, sterilization, and global distribution.

Because so much of this footprint sits outside a company's direct operational control, reducing it requires active partnership with suppliers.

MedTech companies and health systems involved in CHARME came together through the Sustainable Procurement workstream to collaborate on this shared challenge and opportunity.

Accomplishments

The CHARME workstream explored strategies for supplier engagement, including supplier segmentation and communication, integrating sustainability expectations into codes of conduct and RFP language, and delivering training programs. Each organization independently determined supplier engagement, RFP terms, supplier evaluation methods, and purchasing decisions.

What's Next

The workstream continues to meet to raise awareness of effective strategies, tools, and resources for supplier engagement.

Publications & Dissemination

Reach, participation, and momentum

CHARME Publications

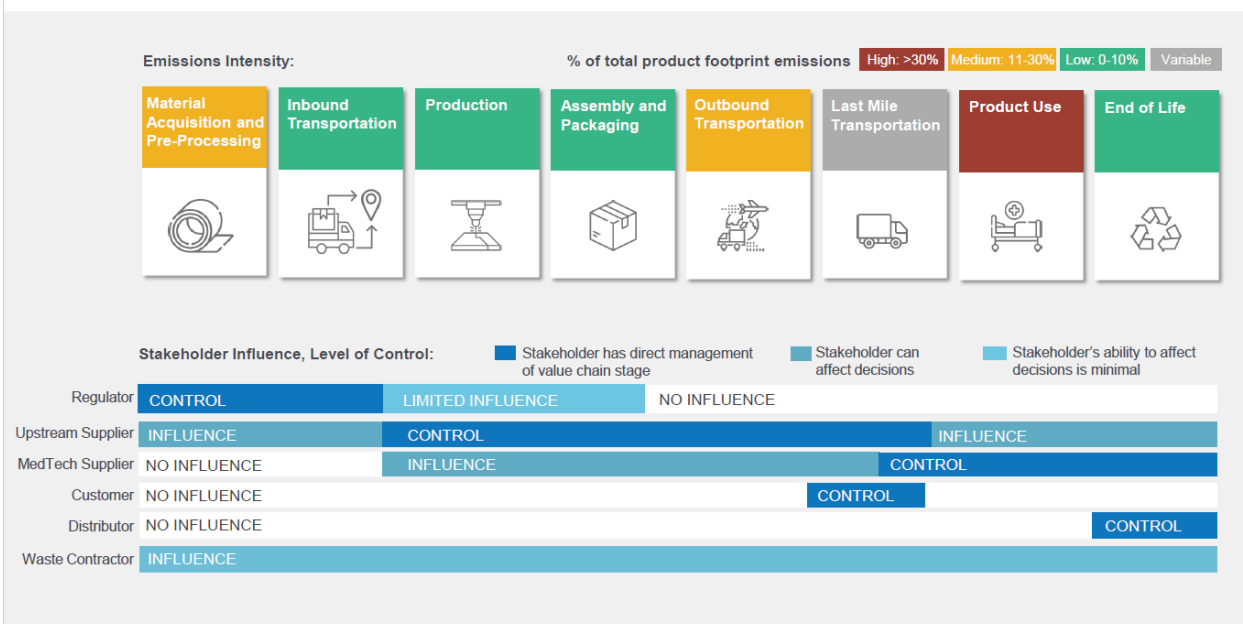
Three workstreams produced practical, field-tested toolkits and playbooks to share implementation insights and case studies from their supply chain sustainability strategies.



These toolkits are free and publicly available and ready for health sector leaders to put into action. Each is designed to support low-risk, high-impact strategies that reduce costs, decrease waste, lower emissions, and strengthen supply chains without disrupting care.



MEDTECH LARGE EQUIPMENT VALUE CHAIN: EMISSIONS INTENSITY



Find and download all of our publications at www.sustainablepurchasing.org/charme-publications

Communications Metrics

2024-2026

Presentations

4

Webinars Held

350+

Total Attendees

10

Conference Presentations

Newsletter

6

Issues Published

500+

Subscribers

46%

Average Open Rate

Publications

4

Publications

50+

Co-Authors and Contributors

300

Downloads April-June 2026

Social Media

289

Followers

6K

Impressions

250+

Reactions & Reposts

Launching the Next Phase

CHARME 2026–2028

Two Years of CHARME

June 2024 – May 2026

What Phase 1 Set Out to Achieve

Launched in June 2024, CHARME’s two years set out to prove that health systems, suppliers, and distributors could collaborate directly on the MedTech supply chain’s environmental footprint by building shared frameworks, piloting lower-carbon practices, and developing the playbooks needed to scale impact across the sector.



What We Accomplished

- Five workstreams piloted lower-carbon practices in product design, durability, reprocessing, renewable energy, and procurement
- Co-authored toolkits and playbooks now in use across health systems — including launderable gowns, SUD reprocessing, and bioplastics guidance
- Formed a cohort progressing toward a shared Virtual Power Purchase Agreement

12-Month Timeline: May 2025 – May 2026

May 2025 CleanMed Workshop	Sep 2025 CHARME Roundtable at Vizient Connections Summit	Jan–May 2026 Retention & Recruitment of Participants	Mar 2026 Launch of CHARME 2026
Jun–Dec 2025 Completion of Pilots & Playbooks	Jan–May 2026 Design & Pilot Planning for Next Two Years	Mar–May 2026 Publication & Dissemination of Playbooks	May 2026 CleanMed Workshop & Project Kick-Offs

Welcoming New Participants

CHARME is pleased to welcome new organizations to the collaborative, deepening our collective capacity to reduce MedTech emissions across the supply chain.

Health Systems:



Beth Israel Lahey Health

Suppliers & Distributors:



New Pilot Projects in 2026

Healthcare Plastics Recycling Pilot

Pilot and scale healthcare and MedTech plastics recycling, planning for circularity

Product Restocking

Redesign restocking workflows to prevent disposal of unused single-use supplies used in patient care

Bioplastics Innovation Challenge

Event designed to accelerate adoption of bioplastics in healthcare packaging and products

Optimizing Packaging for Medical Devices & Supplies

Redesign device and supply packaging to minimize excess materials and void space, explore low-carbon alternatives, and explore reusable packaging and reverse logistics

Order Consolidation

Develop partnerships between health systems and suppliers to advance order consolidation and reduce transportation emissions

Modal Shifts

Shift from high-emissions transportation methods (air freight) to sea, rail, or ground — reducing transportation carbon footprint

Emissions Calculator

Develop and test a standardized tool to quantify emissions and cost impacts of ordering and shipping decisions.

Join Us in What's Next

"As CHARME enters its next year, we're focused on scaling these proven pilots into broader adoption across the healthcare sector, helping more organizations reduce costs and waste while easing the burden on care teams. We're excited to build on this momentum and expand our collaboration with health systems and suppliers to drive even greater impact."

— Cristina Indiveri, VP of Core Tenet Programs, Vizient Inc

Get Involved

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