



# CHARME

COLLABORATIVE FOR HEALTHCARE ACTION  
TO REDUCE MEDTECH EMISSIONS

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## 2025 PROGRESS REPORT Executive Summary

Highlights and Lessons from Year 1

# CHARME 2025 Progress Report: Highlights and Lessons from Year 1

Healthcare's supply chain is the largest contributor to the sector's climate footprint—accounting for nearly 80% of its greenhouse gas emissions. Within this, medical devices and supplies represent an estimated 7% of total U.S. health sector emissions. As climate-related disruptions grow in frequency and intensity, the need to decarbonize and build more resilient supply systems has become urgent—not only for the environment, but for continuity of care and patient safety.

In response, CHARME—the Collaborative for Healthcare Action to Reduce MedTech Emissions—was launched to align the healthcare ecosystem around actionable, scalable solutions. Convened by the Sustainable Purchasing Leadership Council (SPLC), co-chaired by Kaiser Permanente and Vizient, and advised by Accenture, CHARME represents a pre-competitive, multi-stakeholder effort to reduce emissions embedded in healthcare products, packaging, procurement, and operations.

## Why It Matters Now

Climate change is already disrupting care. From hurricane-related IV fluid shortages to supply chain shocks driven by wildfires and floods, climate-fueled disruptions strain both clinical and operational systems. These events create a dual challenge: supply disruptions and care surges. CHARME's work addresses both the root causes and the system fragility revealed by these crises.

## CHARME Features Five Workstreams

### Product Innovation



Investigate opportunities to reduce embodied carbon emissions through sustainable alternatives, including material and product changes, and improve end-of-life outcomes.

### Product Durability



Evaluate and pilot opportunities to replace single-use devices with durable alternatives while maintaining patient safety in different clinical environments.

### Single-Use Device Reprocessing



Accelerate adoption of reprocessed SUDs by educating key stakeholders, running product pilots, and addressing key business model barriers.

### Renewable Energy



Execute an aggregate virtual Power Purchase Agreement (VPPA) to procure renewable electricity for CHARME participants and bring new renewable capacity onto the grid.

### Sustainable Procurement



Align approaches to effectively engage with supplier partners to set and pursue emissions reductions goals.

# Workstream Progress and Key Insights



## Product Innovation

**Goal:** Reduce the carbon footprint of medical products through material innovation and circular design.

**Highlights:**

- Piloting bioplastics in plastic wrap to reduce fossil fuel-based plastic use
- Scaling health care plastics recycling through material recovery facilities (MRF)
- Developing a product lifecycle emissions mapping tool to identify hotspots

**Insights:** Circular solutions require infrastructure; without pathways for recovery, sustainable products risk ending up in landfills. Tools that visualize emissions along the value chain are valuable.



## Produce Durability

**Goal:** Replace disposable products with durable alternatives, starting with launderable isolation gowns.

**Highlights**

- Designing a comprehensive toolkit with guidance on sourcing, stakeholder engagement, and infection control alignment
- Drawing on pilots from Stanford, Northwell, and Providence to inform best practices

**Insights:** Durable products reduce waste and microplastic pollution but require cultural change, operational planning, and leadership buy-in. Flexibility is key to meeting the needs of diverse systems.



## Single Device Reprocessing

**Goal:** Expand safe, sustainable reprocessing of medical devices to reduce waste and emissions.

**Highlights**

- Outlining a field-tested playbook for reprocessing implementation, including quality and safety standards, contracting guidance, and cost-benefit data
- Collecting case studies to address misconceptions and inspire confidence

**Insights:** Many health systems lack awareness or clear guidance. Cross-functional collaboration and evidence-based tools are essential for unlocking the potential of reprocessed devices.



## Renewable Energy

**Goal:** Enable health systems and suppliers to access renewable electricity through aggregated purchasing.

**Highlights:**

- Facilitating an aggregate Virtual Power Purchase Agreement (VPPA) model
- Partnering with Schneider Electric as renewable energy advisor
- Educating participants on legal, financial, and regulatory considerations

**Insights:** Aggregated VPPAs offer a powerful path to clean energy access. Peer support and shared tools accelerate adoption for organizations new to energy procurement.



## Sustainable Procurement

**Goal:** Drive consistent supplier expectations on emissions reduction and reporting with aligned messaging.

**Highlights:**

- Drafting a joint supplier letter articulating shared expectations for sustainability action
- Coordinating quiet but strategic rollout among health systems and suppliers
- Planning distribution by end of 2025

**Insights:** Coordinated, adaptable communication can drive large-scale change without public pressure. Success depends on scale and continued engagement with sector-wide initiatives.

# CHARME at a Glance

40+

Organizations

Including health systems, suppliers, GPOs, and NGOs

150+

Leaders

In sustainability, supply chain, product development, and care delivery

\$900B+

Annual Revenue

From suppliers participating in the initiative

280+

Hospitals

Across participating health systems with 6,400+ care sites



## Collaborative Structure

CHARME’s strength lies in bringing together diverse stakeholders—health systems, suppliers, distributors, GPOs, and NGOs—to pursue shared solutions to common challenges.



## Compliance Safeguards

As a pre-competitive collaborative, CHARME operates with clear safeguards to maintain trust and ensure full compliance with antitrust and competition laws.



## Focus on Action

CHARME prioritizes interventions that carry strong potential to lower emissions and cost and are feasible to implement, possible to scale, and require collaboration to realize.

## What is Next?

The first year of CHARME has laid a powerful foundation. Across every workstream, participants have developed practical approaches to accelerate emissions reduction while improving care resilience. The path forward will require continued trust, innovation, and partnership—and this past year proves that ambition turns into action when we work together. CHARME is not just a sustainability initiative—it’s a vital step toward a stronger, cleaner, and more patient-centered future for healthcare.



### Launch Pilots

- Launch pilots and toolkits across each workstream to bring concepts into action



### Scale Strategies

- Scale successful strategies across the healthcare ecosystem through how-to guides and peer learning



### Explore new Priorities

- Explore new priorities including transportation, packaging innovation, and renewable energy access beyond electricity



### Expand Collaborations

- Expand collaboration with new suppliers, systems, and NGOs to amplify impact