

Reimagining Clinical Trial Surplus: Harnessing Donations to Close the Global Healthcare Gap

Clinical trials are essential for the development of life-saving treatments, yet they generate significant volumes of unused medical supplies and equipment. Historically, these materials are incinerated or sent to landfills, contributing to environmental waste and lost humanitarian value. This white paper explores a transformative alternative: structured donation of clinical trial surplus to healthcare systems in need. Drawing on insights from a diverse panel of industry leaders, this document outlines the operational, ethical, and logistical framework supporting clinical supply donation, with a focus on the Kits4Life initiative and the MedSurplus Alliance.

INTRODUCTION

The global clinical research enterprise is marked by tremendous investment, innovation, and complexity. However, inefficiencies remain, especially in the management of surplus materials at the conclusion of trials. These materials, which include everything from lab kits and personal protective equipment to high-tech medical devices and electronics, are often destroyed due to regulatory inertia or a lack of awareness of alternatives.

Simultaneously, healthcare systems in low- and middle-income countries (LMICs) and underserved domestic regions face chronic shortages of the very supplies being discarded. Donation programs that repurpose these resources offer a powerful, underutilized solution. This paper discusses the Kits4Life platform as a pioneering model that bridges the gap between surplus and need.

ABOUT THE AUTHORS:

This white paper was informed by panelists and contributors from Eli Lilly, Vertex Pharmaceuticals, Brothers Brother Foundation, Impact Share Clinical Group, and other leaders in clinical trial operations and humanitarian logistics.

THE 4LIFE ECOSYSTEM

Kits4Life is a structured donation platform created to enable clinical trial sponsors to securely and responsibly donate surplus supplies. It operates under the broader MedSurplus Alliance, a program of the Task Force for Global Health. The Alliance supports a network of accredited Medical Surplus Recovery Organizations (MSROs), which ensure the safe handling, de-identification, and redistribution of clinical materials.

The Kits4Life platform streamlines the donation process by providing legal templates, standard operating procedures, and logistical support. It enables sponsors to divert high-quality, unused clinical supplies away from destruction and into critical healthcare and humanitarian settings worldwide.

Key benefits of the ecosystem include:

- Legal and compliance assurance through MSRO ownership of materials
- Streamlined donation processes and support for onboarding
- Real-time reporting and transparency
- Global distribution through vetted partners

WHAT CAN BE DONATED?

While the initial focus was on lab kits, the range of eligible materials has broadened significantly. Donatable items now include:

- · Lab and phlebotomy kits
- Infusion pumps and clinical recliners
- PPE such as gloves, gowns, and masks
- Laptops, mobile devices, and wearable trackers
- Educational materials and printed recruitment items
- · Office and medical furniture

Donations are evaluated based on condition, labeling, expiration dates, and potential for reuse. Even expired materials can serve valuable roles in training programs or educational settings. Materials that can be donated at the conclusion of a trial is not limited by quantity. Anything from a handful to palate levels can be considered for donation.

Sponsors are encouraged to consult with Kits4Life and MSROs to evaluate materials, ensuring proper sorting, documentation, and routing to appropriate recipients.

ADDRESSING LEGAL AND COMPLIANCE CONCERNS

A primary concern for sponsors is the potential liability associated with donated materials. Kits4Life addresses this by working exclusively with MSROs that assume legal responsibility upon receipt of the supplies.

MSROs follow international guidelines, including those from the World Health Organization (WHO), to:

- Remove sponsor and protocol identifiers
- Inventory materials by category, condition, and expiration
- Ensure safe handling and delivery to legitimate end-users

This de-risks the donation process for sponsors and aligns it with existing regulatory practices used in destruction workflows.

ENVIRONMENTAL AND SOCIAL IMPACT

Clinical trial donations offer profound environmental and social returns:

- **Environmental:** Donations significantly reduce landfill contributions and incineration, helping sponsors meet corporate sustainability and carbon reduction goals.
- **Social:** In 2024 alone, Kits4Life enabled donations were estimated to impact over 650,000 lives worldwide.
- **ESG Reporting:** Sponsors can include donation metrics in their Environmental, Social, and Governance (ESG) disclosures, enhancing public trust and stakeholder engagement.

Impact reports provided by Kits4Life quantify donations in terms of tonnage diverted, types of materials shared, and lives touched. These reports are increasingly used in internal and external reporting.

OPERATIONALIZING DONATIONS: FROM THEORY TO PRACTICE

Launching a donation program begins with:

- 1. Joining Kits4Life as a member
- 2. Selecting MSRO partners
- 3. Mapping surplus material availability (site-level or bulk)
- 4. Coordinating shipping and documentation

Best practices include piloting the program with a single closing study to evaluate logistics and refine internal workflows. Sponsors report high site participation rates (up to 97%) when given the option to donate surplus supplies.

Training materials, legal frameworks, and communication templates are available to ease the internal adoption of donation policies. Several leading companies have embedded donation processes into trial closeout workflows, making donation the default, not the exception.

CASE STUDIES IN GLOBAL HEALTH IMPACT

- **Eli Lilly** donated laptops and medical devices that served youth tech programs in the U.S. and hospitals in Malawi.
- **Vertex Pharmaceuticals** coordinated a multi-departmental initiative to donate phlebotomy supplies, infusion pumps, and educational kits across borders.
- **Brother's Brother Foundation** received and distributed nine healthcare containers to St. Joseph's Hospital in Malawi, including critical clinical equipment.

These stories illustrate the real-world potential of transforming surplus into life-saving resources, especially in settings where even basic tools are scarce.

EXPANDING THE PROGRAM GLOBALLY

Although most current donations originate from U.S. sites, the program is expanding:

- Australia now hosts a partner MSRO (Rotary MediShare)
- New MSROs in Europe are in development
- Donations can now support phlebotomy training, women's health, disaster response, and educational infrastructure globally

Each new sponsor adds insight and infrastructure, growing the program's capacity and reach.

CHALLENGES AND FUTURE OPPORTUNITIES

Barriers include:

- Regional limitations (e.g., few MSROs outside the U.S.)
- Cost of shipping (though often offset by donor support or cost-sharing)
- Compliance resistance (especially around sponsor identifiers)

Opportunities:

- Recycling programs (e.g., for expired vacutainers)
- New NGO partnerships for training and non-clinical use
- Expansion into commercial pharmaceutical surplus (e.g., near-expired vials)

With increasing participation, the goal is to make clinical trial donations a standard industry practice.

CONCLUSION: A CALL TO ACTION

Repurposing clinical trial surplus is a scalable, impactful, and increasingly urgent solution to global healthcare inequities. Programs like Kits4Lifeoffer a proven pathway to do so safely, efficiently, and in compliance with global standards.

Sponsors, CROs, and clinical supply professionals are urged to:

- Evaluate current waste practices
- · Initiate pilot donation programs
- Leverage ESG reporting to share their impact

By choosing donation over destruction, the clinical research community can enhance both human health and planetary sustainability.

APPENDICES

- Sample MSRO Agreement Template
- Clinical Supply Donation Checklist
- ESG Impact Reporting Sample
- Global Distribution Map (2024)

To Learn More: Visit https://kitsforlife.org for resources, partnership opportunities, and case studies.

GCSG would like to thank LifeScience Logistics for cosponsoring the development of this important industry article.

Learn more about LifeScience Logistics at www.lslog.com

