



Driving the circular economy in healthcare through innovation procurement

16 August
2021

Agenda

Open webinar 11:30-12:30 CEST

Embedding a circular economy model through sustainable procurement

Introducing innovation procurement

Towards Zero Waste Operating Theatres: Innovation procurement in action

Closed forum 12:30-13:30 CEST

Innovation procurement processes / Joint Statement of demand

Share experience on circular solutions in healthcare

Speakers



Arianna Gamba, Circular
Healthcare Programme
Manager

Health Care Without Harm
(HCWH) Europe



Gaynor Whyles, Director

Jera Consulting



Sam Willitts, Head of
Sustainability

University Hospitals Bristol
and Weston NHS FT

About HCWH Europe



We are a non-profit European network of hospitals, healthcare systems, healthcare professional bodies, local authorities, research/academic institutions, and environmental and health organisations.

Health Care Without Harm is a global movement:

- Three regional HCWH offices (Europe, USA, South East Asia) and virtual team in Latin America
- Partners around the world (Australia, China, India, South Africa)

First, do no harm



Vision: Healthcare mobilises its ethical, economic and political influence to create an ecologically sustainable, equitable and healthy world.

Mission: Transform healthcare so that it reduces its environmental footprint, becomes a community anchor for sustainability and a leader in the global movement for environmental health and justice.

Our members in Europe



4,917



1,045,352



112,573



60.7m

92 members in 19 countries

Global Green and Healthy Hospitals



GGHH is an international network of:

- Hospitals
- Healthcare facilities
- Health systems
- Health organisations

This worldwide community comprises **1,450 members** in **72 countries**, representing the interests of over **43,000 hospitals/health centres**.



HCWH Europe Programmes



Climate-smart Healthcare



Sustainable Food



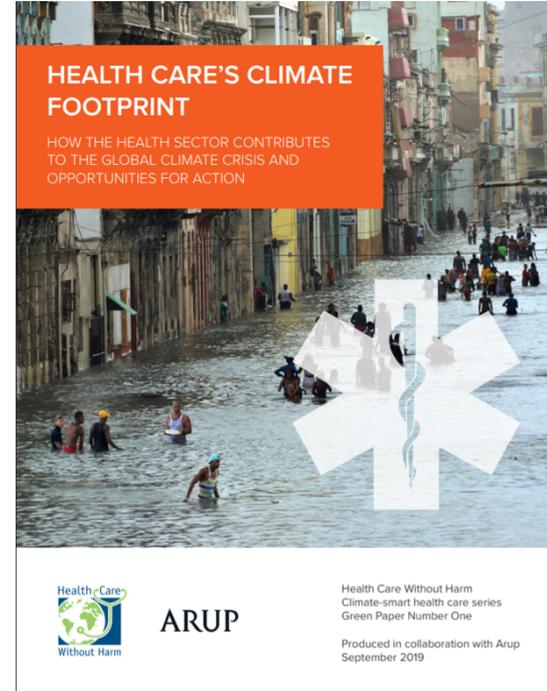
Safer Pharma



Circular Healthcare

The impact of the healthcare sector

- Healthcare climate footprint accounts for 4.4% of total carbon emissions
- If the global health care sector were a country, it would be the fifth-largest greenhouse gas emitter on the planet
- Supply chain drives 75% of emissions within EU healthcare



Wasteful products and practices



Wasteful products and practices



Healthcare packaging during a HCWH Europe plastic waste audit

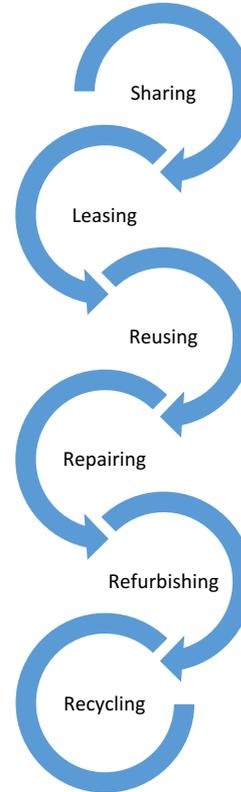
The influence of the healthcare sector – sustainable procurement

- Healthcare purchasing power: Healthcare accounts for approximately half of public spending in the EU – 14% of annual EU GDP in total
- Sustainable procurement as a preventive medicine



Circular economy

- A model of production and consumption
- Waste is reduced to a minimum
- Materials are kept within the economy wherever possible through recycling - disposal is the last resort
- Green chemistry for toxic-free products

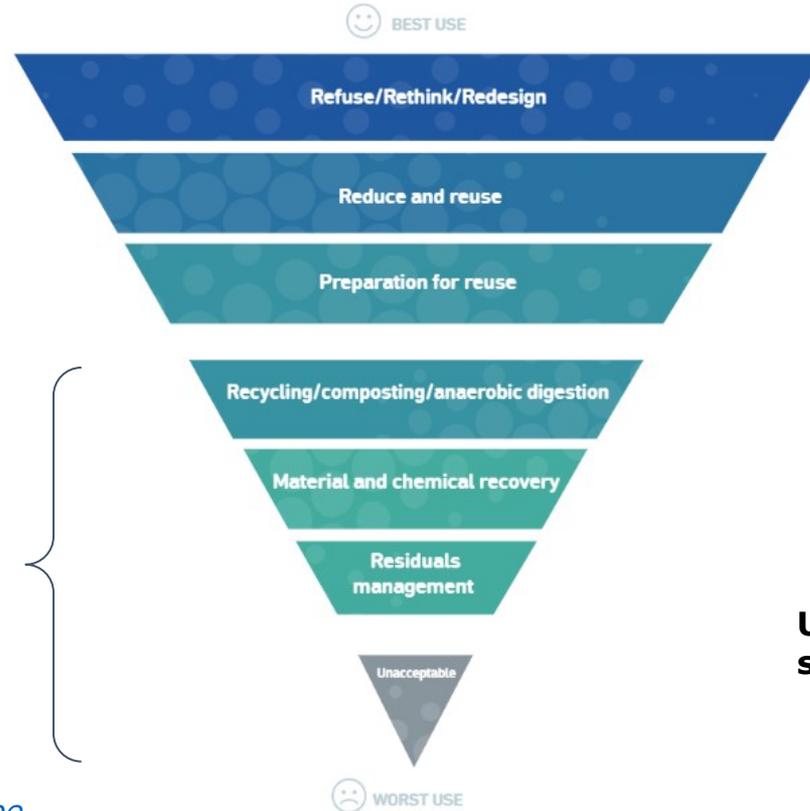


Respecting the waste hierarchy

Prevention

(where we want to focus our efforts)

Waste



Unsatisfactory/ non-systemic solutions:

- Plastic recycling
- Compostable plastics, 'Bioplastics' (bio-based, biodegradable)

Refuse wasteful products / rethink healthcare practice



- **Rethink custom packs/ pre-maid kits for surgery:** In one hospital, pre-made kits for tonsil surgery included 12 unnecessary single-use items out of 40, and removing these items reduced costs from \$77.29 to \$66.04 USD per pack.¹
- **Rethink healthcare procedures:** opening item until they are actually needed for the surgery.
- Prevent waste through **improved packaging design:** The Skåne Region in Sweden found that 6% of their gloves were discarded due to them falling on the floor.²

¹Penn, E., et al. (2012) *Reducing disposable equipment waste for tonsillectomy and adenotonsillectomy cases.*

²HCWH Europe. (2018) *Reducing the carbon footprint of healthcare through sustainable procurement*

Reduce, replace and reuse: examples



- Reserve **single-use items only for essential applications** (no viable alternative exists, or there is a proven high risk of infection)
- Reusable **textile** (e.g. medical protective clothing, drapes, bed pads, covers, towels, etc.)
- Reusable **options in the operating theatres**: suction canisters, pulse oximetry probes, basins/pitchers, positioning devices, blood pressure cuffs, tourniquets, sharps containers.¹
- Reusable **sterilisation containers** as an alternative to blue wrap can half the greenhouse gas emissions.²

¹Practice Greenhealth. *Reuse materials and equipment*. <https://practicegreenhealth.org/topics/greening-operating-room/reuse-materials-and-equipment>

² Babcock, L. (2016) *Reducing Solid Waste in Surgical Centers by Replacing Blue Wrap*.

Reprocess medical devices



- Centro Hospitalar de São João in Porto, Portugal, showed that reprocessed devices achieved the same clinical results as using the original single-use devices, with no added risk. Financial savings were considerable – up to 50% per device.¹
- Reprocessing medical devices can include: ultrasound and electrophysiology catheters and cables, endoscopic devices and arthroscopic and laparoscopic instruments (scalpels, trocar components, cutters, sealers, ablaters, tips, passers, dissectors, graspers, scissors, clamps, biopsy forceps, and snares), orthopedic bits, saws, burrs and blades, and external fixation components, deep vein thrombosis compression sleeves, balloon inflation devices, femoral compression devices.²

¹de Sousa Martins, B. et al. (2018) *Reprocessing of Single-Use Medical Devices: Clinical and Financial Results*. Portuguese Journal of Public Health, 36(3), 150-156

²Practice Greenhealth. *Reprocessed medical devices*. <https://practicegreenhealth.org/topics/greening-operating-room/reprocessed-medical-devices>

Plastics Recycling/ Down-cycling?



- Is it the right choice?
- When recycling ensure that:
 - ❑ Local waste collection accepts plastics recycling waste streams and clear up any potential misconceptions regarding plastics from healthcare (85% of healthcare waste is comparable to domestic waste).¹
 - ❑ Plastics don't contain any hazardous chemicals that disqualify them from recycling (e.g. phthalates used in PVC can impede recycling or end up in recycled products where they still remain hazardous).
 - ❑ There is demand - virgin materials are currently cheaper, making recycled material less economically attractive.
 - ❑ Waste is properly segregated - educate staff and visitors to segregate waste so that the plastic recycling stream is not contaminated.

¹WHO. (2017) *Safe management of wastes from health-care activities*. <https://apps.who.int/iris/bitstream/handle/10665/259491/WHO-FWC-WSH-17.05-eng.pdf?sequence=1&isAllowed=y>

Scale up: market transformation

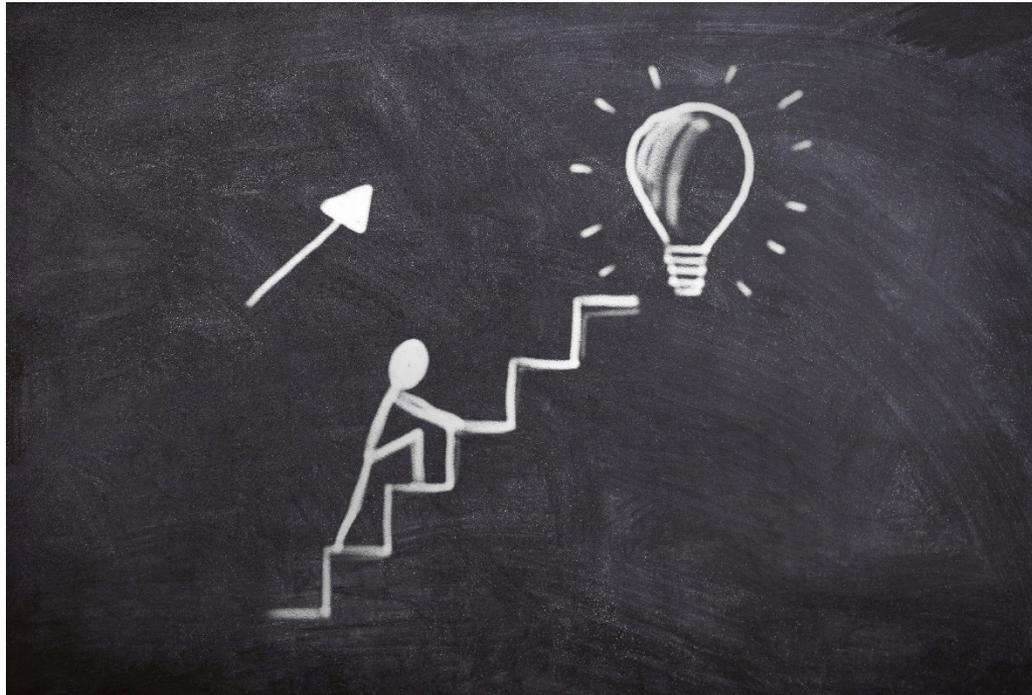
Join the European Healthcare Market Transformation Network

Aim: to mobilise the economic influence of the sector to drive markets towards the supply of healthier and more sustainable products and services. Transform the healthcare sector's supply chain to yield **co-benefits for patients, the environment, and wider society.**

- Harmonisation of procurement standards
- Supply chain engagement and cooperation



Innovation



Flotilla
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