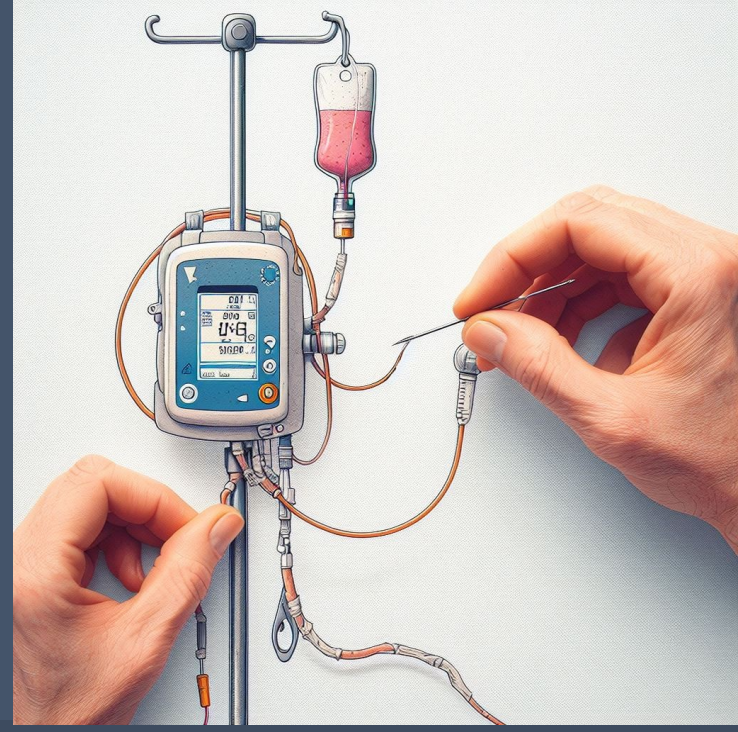

UNIVERSITY OF TWENTE.
TECHMED CENTRE
THE TECHMED EVENT
SHAPING A HEALTHY FUTURE



A STITCH IN TIME SAVES MORE THAN NINE:

THE SUSTAINABILITY OF REPAIR OF MEDICAL EQUIPMENT

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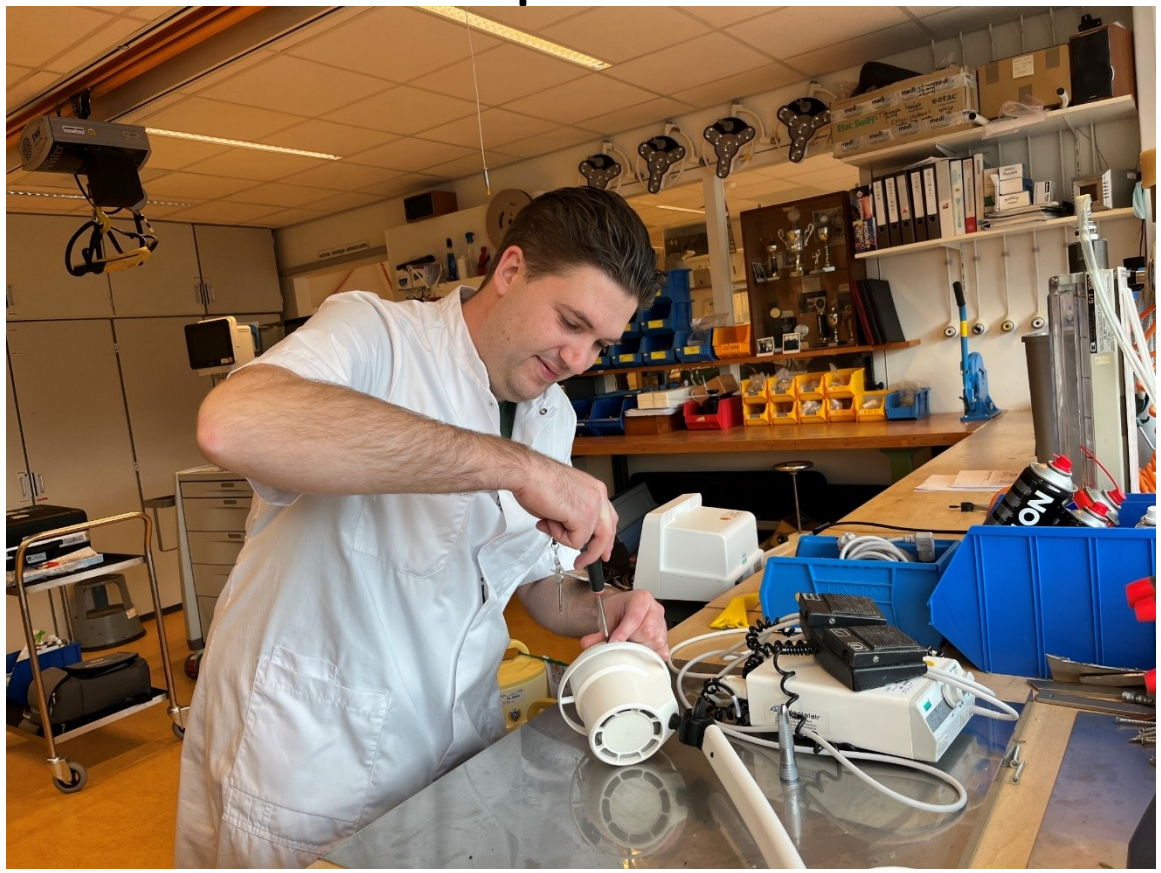
Med Tech maintenance – R is for Repair

- **Primary objective of Med Tech maintenance:**

- Provide safety for patients
- Prevent unplanned disruption of care process
- Prevent unnecessary costs of investing in new equipment



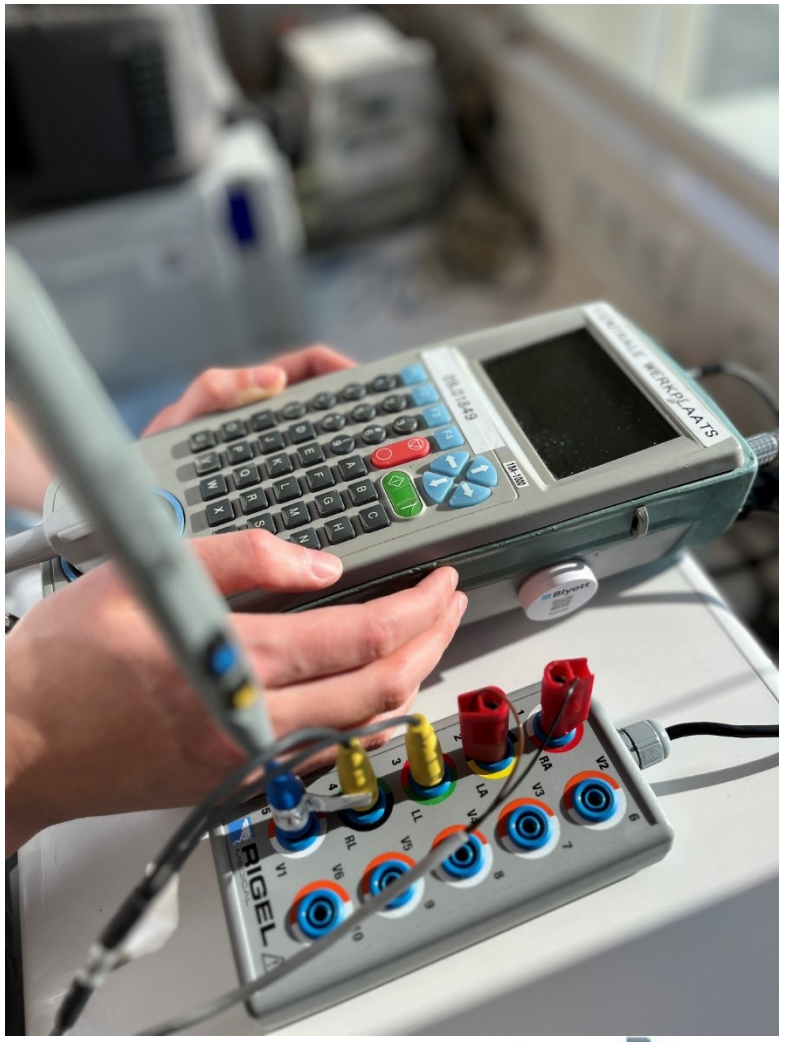
- **We now add sustainability goals:**

- Maintenance prevents early replacement of equipment and contributes to maximising its life span

- As a Biomed department we aim to minimise our footprint by minimising use of energy, materials and transportation

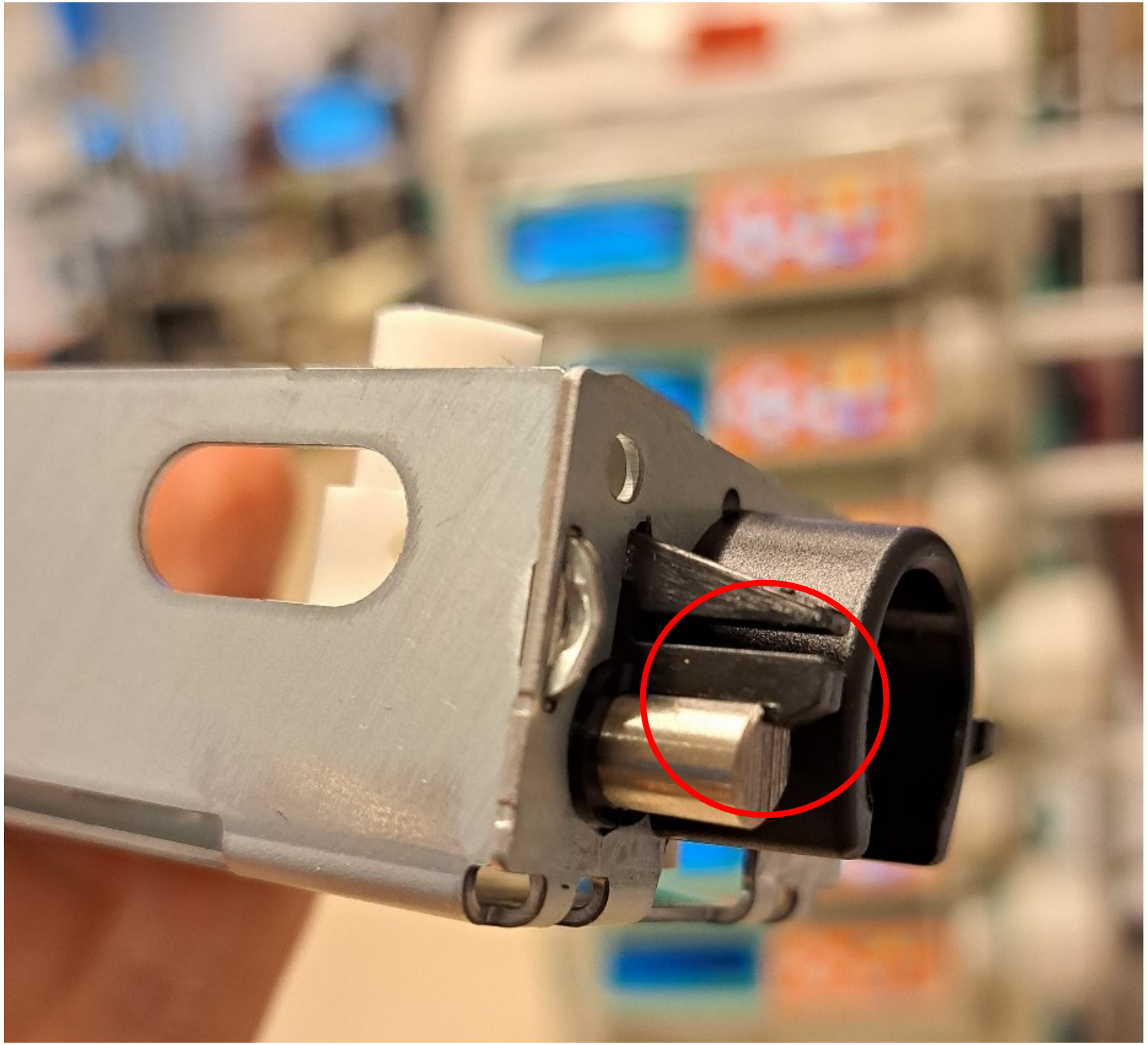
- **Isala:**
- Total number of medical equipment: ~ 35.000
- Maintenance employees Biomed department: 37

Shift from corrective to preventive mai



Reducing corrective maintenance: example infusion pumps

- Better user instruction
- Timely and better preventive maintenance
- Preventing user damage



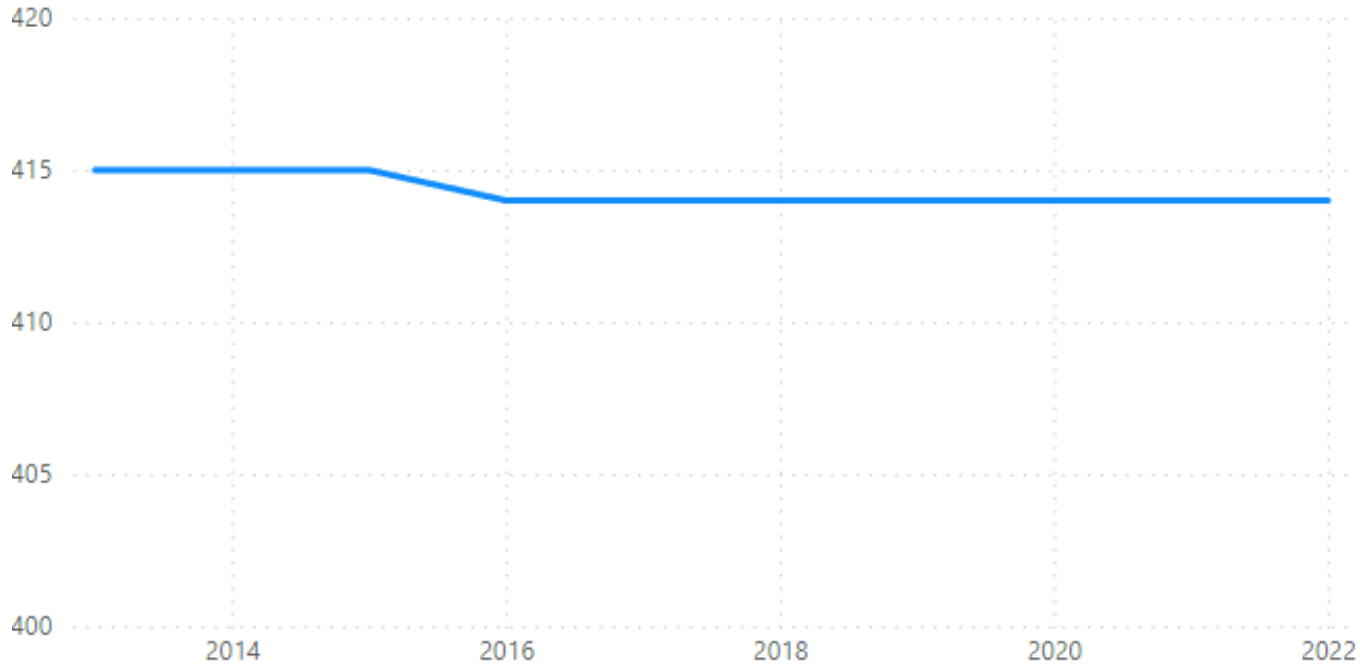
Prevention of replacement by repair

- **Time to first repair for infusion pumps:**
- 2 years and 10 months average,

- **Time to first repair for all medical equipment:**
- 2 years 10 months average

- **Large consumption of replacement parts:**
- ~ 450 batteries per year for all pumps present

Number of infusion pumps in use after initial purchase in 2013



Is repair on site more sustainable than performed by vendor?

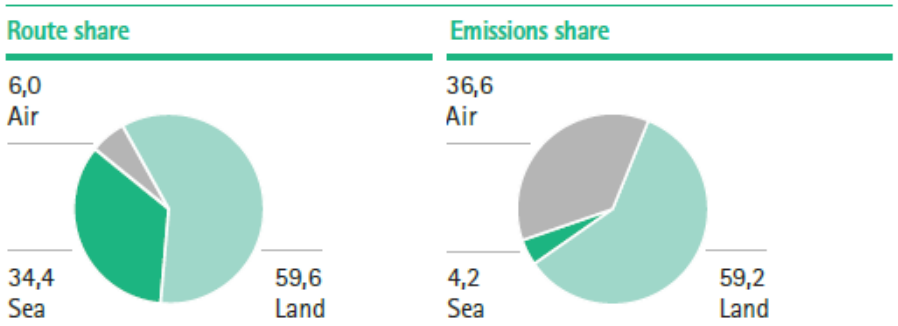
- **Maintenance onsite**
- Requires local biomed engineers
- Need for workspace in hospital
- Production and transportation of spare parts still necessary
- De-assembly and stocking of spare parts from defective equipment possible

- **Maintance by vendor contract**
- Much more travelling by vendor’s service engineers
- Smaller workspace needed in hospital

Prevention of replacement

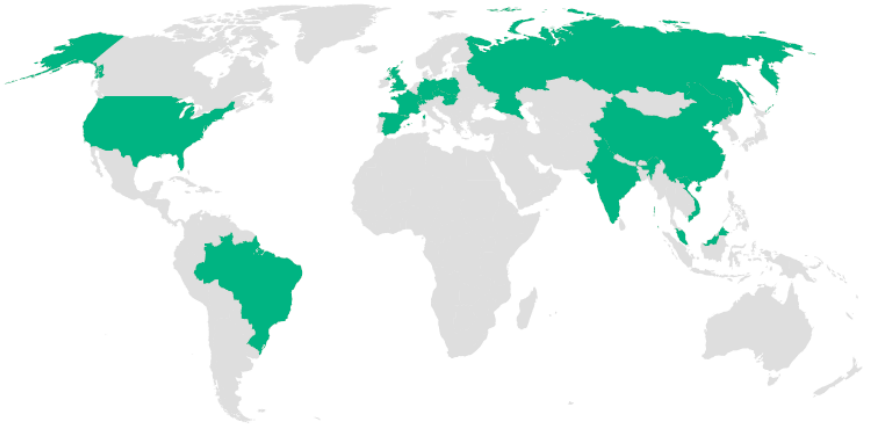
- **Prevention of:**
- Creation of waste
- Production and delving of new raw materials
- [illegible]ump

TRANSPORT TYPES AND THEIR CO_2 EMISSIONS 2020
in %



Cumulative data from the 15 reporting countries and from 32 other countries in which B. Braun operates. The share of transport types is expressed in ton-kilometers. CO_2 emissions were calculated based on the „"Calculating Greenhouse Gas Emissions in Forwarding and Logistics per DIN EN 16258"" guideline from the German Freight Forwarding and Logistics Association.

SUSTAINABILITY AT B. BRAUN



1,4 kg of plastic and metals

Does Repair contribute to sustainable healthcare?

Yes!

We need more sustainability by design

We need skilled engineers on site