

Sustainable Hospital: Circular Cardiology

Waste audit, identification of hotspots and design of circular solutions for the Intervention Cardiology department

Erasmus Medical Center

Erasmus Medical Center (EMC) and Delft University of Technology (DUT) are working together in the Sustainable Hospital project to increase circularity and dramatically reduce the amount of waste generated in the healthcare sector. <https://sustainablehospital.org>

Within the hospital, the cardiology intervention department has high waste generation, due to reliance on single-use devices and relatively high procedure volumes. Many different devices (i.e. catheters, guidewires) are used, all with different packaging, stored in boxes together with a paper manuals. Erasmus MC would like to know how much waste is created during two different procedures, what type of waste is generated and how waste is handled. From this waste audit, environmental hotspots will be determined. Out of these hotspots, one or two cases are chosen for further evaluation and creation of possible innovative sustainable interventions. This challenging project offers the chance to join and help the cardiology intervention team in their mission to decrease their environmental impact.

This article can give you a first impression:

[Mountains of Cath Lab Waste Could Be Recycled, Study Estimates | tctmd.com](#)

During this graduation project you will start with mapping the waste streams of the Cardiology department at the EMC. From this waste audit, environmental hotspots are determined. Furthermore, from the hotspots, one or two cases are chosen for developing circular interventions.

You will be part of a sustainability impact-driven team of EMC and TUD and can work in our Sustainable Hospital Living Lab at the EMC. Next to your graduation project you can join us in other sustainable healthcare activities like symposia, workshops and more. We are open to discuss how to finetune the assignment with your graduation ambitions.



Waste of heart surgery

For more information: Prof. Jan Carel Diehl (Design for Inclusive Sustainable Healthcare)
j.c.diehl@tudelft.nl