

# Successful adoption of a circular medical device in the East African Market: Certification, Health Policies and Business Models

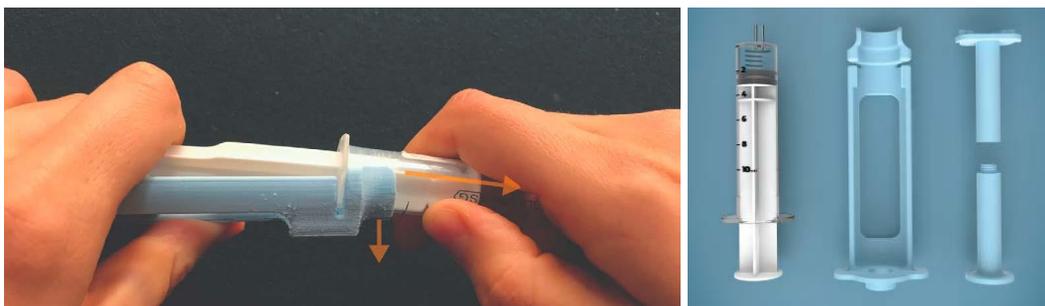
GRADUATION ASSIGNMENT - SPD



## Background.

Universal access to healthcare to a large extent depends on access to medical devices. While medical devices are indispensable to healthcare, many of such medical devices are inaccessible to the majority of people particularly in LRS in SSA. To increase the accessibility of medical devices in LRS, many initiatives are starting to develop circular medical devices that provide inclusive healthcare while reducing environmental impact in LRS in SSA. An example of such initiative is the design of the reusable CHLOE Syringe Extension Device (SDE) that is used to provide anesthesia for the treatment of pregnancy related issues in rural Kenya. CHLOE SED is a good design that extends the length of locally available 10ml syringes to inject anesthesia in the cervix during gynecological procedures. For more info see the Youtube video

[https://www.youtube.com/watch?v=AzEcy1QFMTk&ab\\_channel=JCDiehl](https://www.youtube.com/watch?v=AzEcy1QFMTk&ab_channel=JCDiehl)



However, a good design alone does not make an impact in a healthcare setting. Successful adoption in the local healthcare setting is crucial. In practice, this means that the new devices have to be certified, fit within the local healthcare policies, have a good business model and match the local healthcare system.

## Assignment.

To map-out the certification process of medical devices in Kenya, the local health policy, the local circular economy policy, potential sustainable business models, and relevant stakeholders needed to bring circular medical devices such as CHLOE SED successfully into the Kenyan healthcare system.

**About the Client.**

This assignment is part of the work done by the Inclusive Global Health Lab at TuDelft and TU Delft Global Initiative with a mandate to increase access to healthcare by stimulating the development of inclusive medical devices and services for the Global South.

**Skills needed**

Strong affinity for research and literature search/review, ability to prepare and conduct case studies, plan, execute and analyse interviews and stakeholder workshops?

**Offer**

You will be coached, advised, and supported by technology, policy, design and medical experts from Inclusive Global Health Lab, faculty of Industrial Design Engineering (IDE) and Technology Policy and Management (TPM) and partners in Kenya. Based on the COVID-situation, there might be an opportunity to travel to Kenya to collect data.

Interested in this project? Contact Dr J.C Diehl [j.c.diehl@tudelft.nl](mailto:j.c.diehl@tudelft.nl), Saba Hinrichs-Krapels [S.Hinrichs@tudelft.nl](mailto:S.Hinrichs@tudelft.nl) and Karlheinz [K.T.Samenjo@tudelft.nl](mailto:K.T.Samenjo@tudelft.nl)