# HydroCare

# A low field MRI scanner for subSaharan Africa

Making brain imaging accessible for all



70% Of the world has no access to MRI scanners due to their cost and complexity. The HydroCare brings the MR technology to through a low cost, sustainable and simple design.

The HydroCare focusses on the design and development of a bed system that promotes comfortable imaging of patients with hydrocephalus in low resource settings.

A functional system of the bed has been developed and optimized for a local production and assembly.MR imaging can be provided by MRI technicians with limited knowledge and reduction of human workload. Through implementation of the key components a comfortable experience is provided for the patient. The Hydrocare increases the accessibility of brain imaging in low recourse settings.

#### Key Components



### Low cost

Instead of operating on expensive superconductive magnets such as conventional MRI system. The HydroCare operates at 50mT with off-the-shelf permanent magnets which makes the system accessible and cost-effective.

## Human centred

The HydroCare focusses on comforting the infant with hydrocephalus by promoting parental interaction. The patient can see the parent from inside the MRI scanner through a mirror. Furthermore the workload of the MRI technician is improved by task-guidance

# Sustainable

A complext service contract is not necessary anymore for the maintanance of the low field MRI scanner. By only using standardized tools and parts, the HydroCare can be locally produced, maintained and repaired.







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