

# Validation plan

## Intended use of the product

The product will help the clinicians in quantifying Hippocampus volume in MRI scans.

## Training data collection

The training dataset is "Hippocampus" dataset from the Medical Decathlon competition. Here, we used images with cropped region around the hippocampus. The cropped images with only area of interest helped in reducing the size and improving the model performance.

## Labelling of training data

The labels come from by Radiologists.

## Measuring algorithm's training performance

Jacard and Dice scores were used to measure model training performance. The dataset was split into training/validation and testing subsets.

Training and validation subsets were used during training and testing subset was later used for blind testing.

## Performance on real world data

In the real-world, the model performance should be evaluated based on how it performs on MRI images of different gender, age and condition of patients.

The current model may not perform best on diverse set of images. It is important that the model sees data from patients of various ages, all genders and different conditions during model training.