

Cost-effectiveness analysis of Taptest and Continuous lumbar drainage in comparison to the standard of care in patients with suspected idiopathic normal pressure hydrocephalus from the perspective of the Brazilian Unified Health System.

Braga A; Rosa B; Magliano C.

OBJECTIVES:

To predict Idiopathic normal pressure hydrocephalus (iNPH) patients will benefit from shunt surgery, the tap test (TT) or continuous lumbar drainage (CLD) may be employed. This study's goal is to **evaluate the cost-effectiveness of TT and CLD in comparison to the standard of care**, in which all patients with suspected iNPH underwent shunt surgery.

METHODS:

A decision-tree model was developed considering:

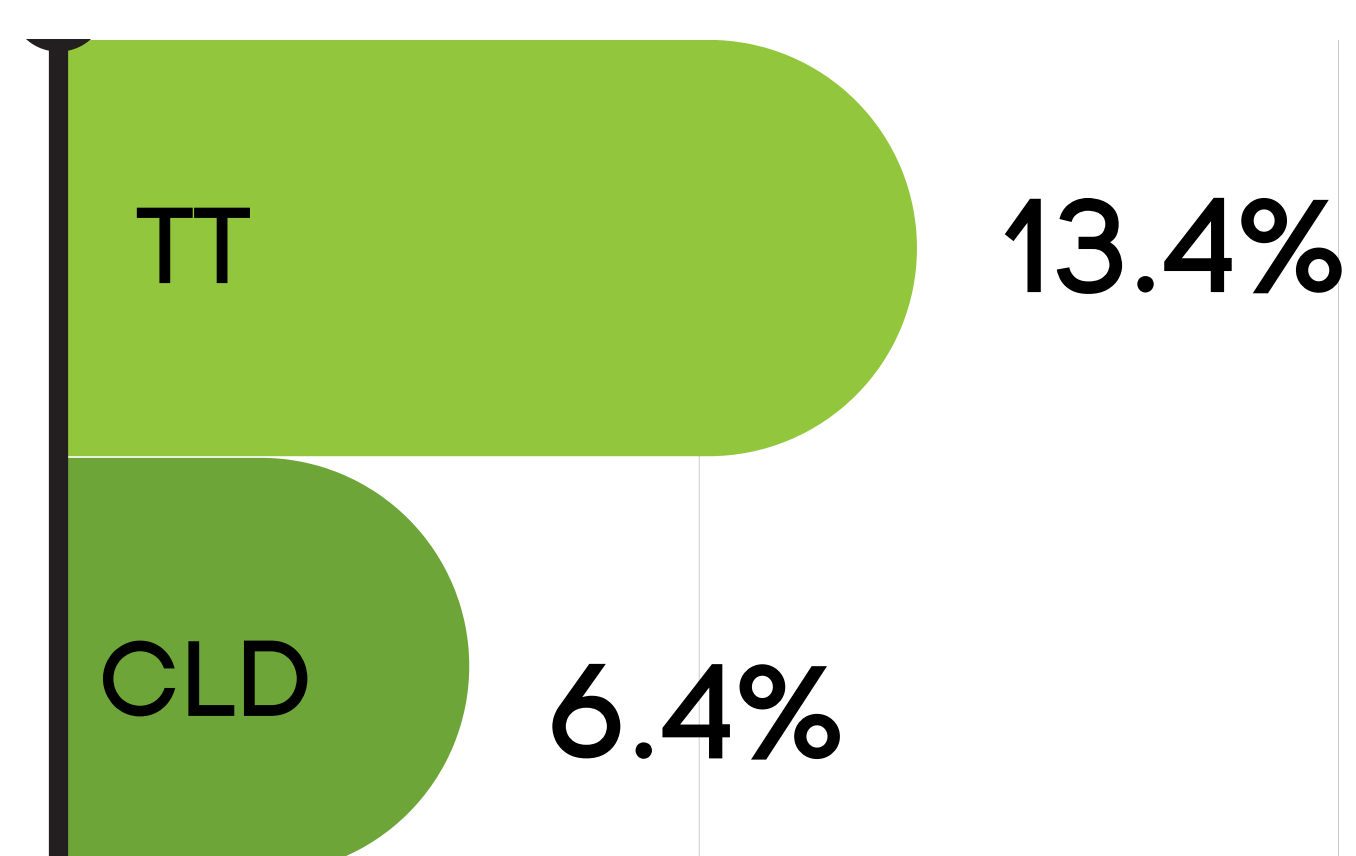
- Costs: Tests, medical assistance, and surgery;
- **Accuracy** of the TT and CLD;
- **Success rate** of the shunt surgery;
- **Risks**: Stroke, bleeding, and meningitis;
- **Utilities** of iNPH patient

RESULTS:

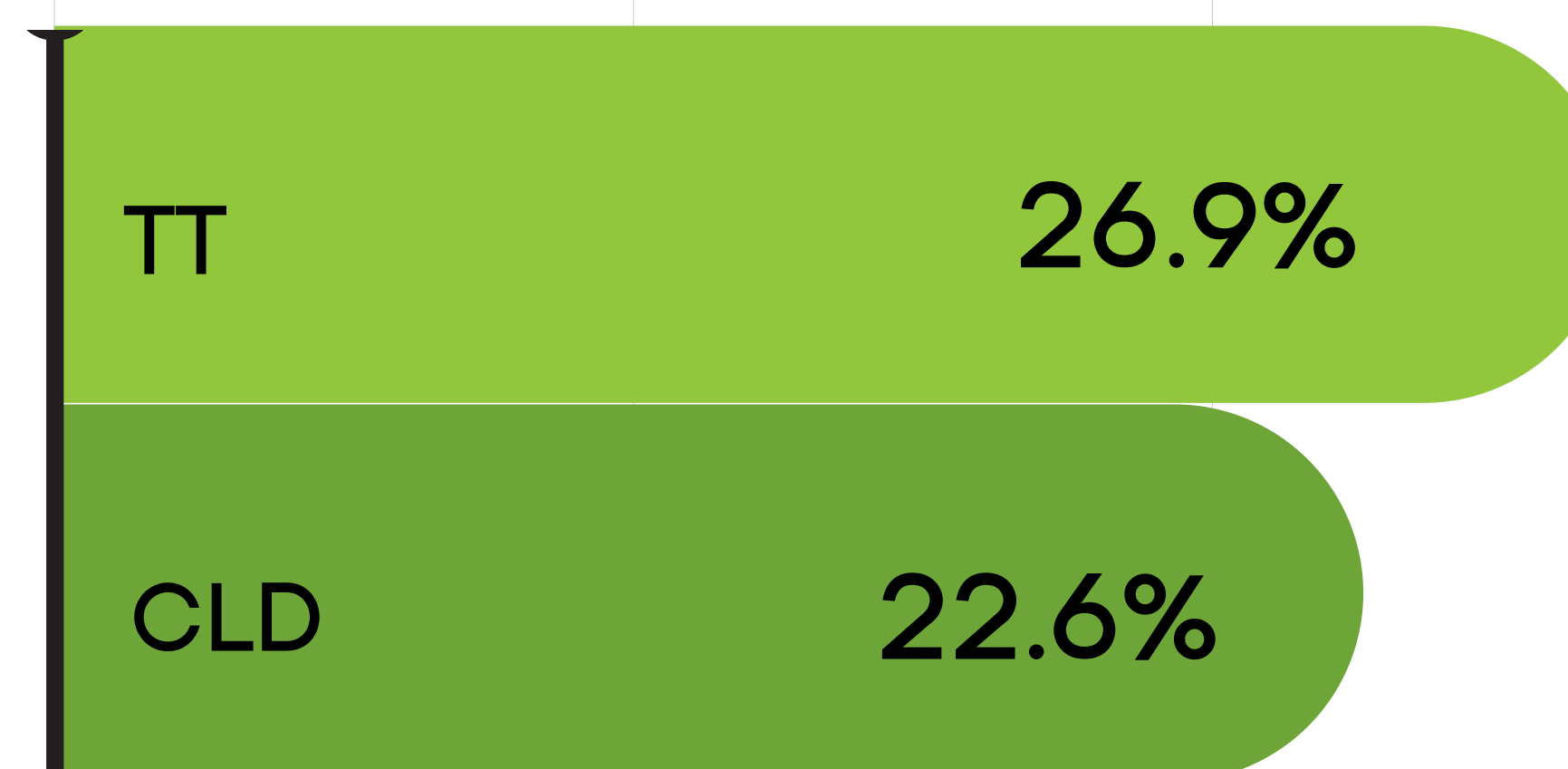
Slight QALYs losses and cost increases, usual care dominated both strategies. Biggest effects on ICER: Success rate of the shunt surgery, Surgery costs and iNPH utility.

Disregarding the modest magnitude of losses in QALYs and the small rise in expenses, there is still a trade-off in using TT and CLD to indicate shunt surgery for patients with suspected iNPH.

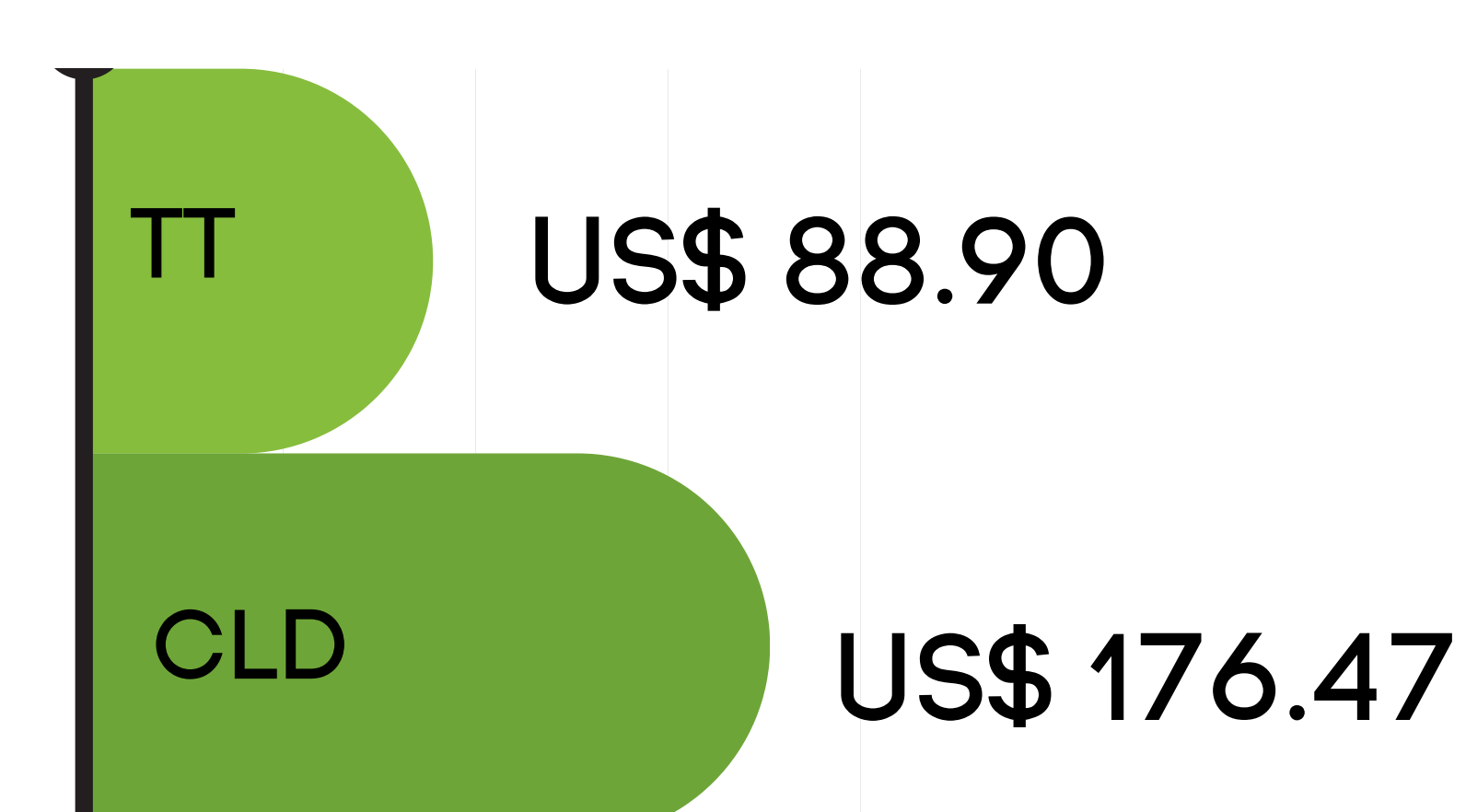
Averting necessary surgery



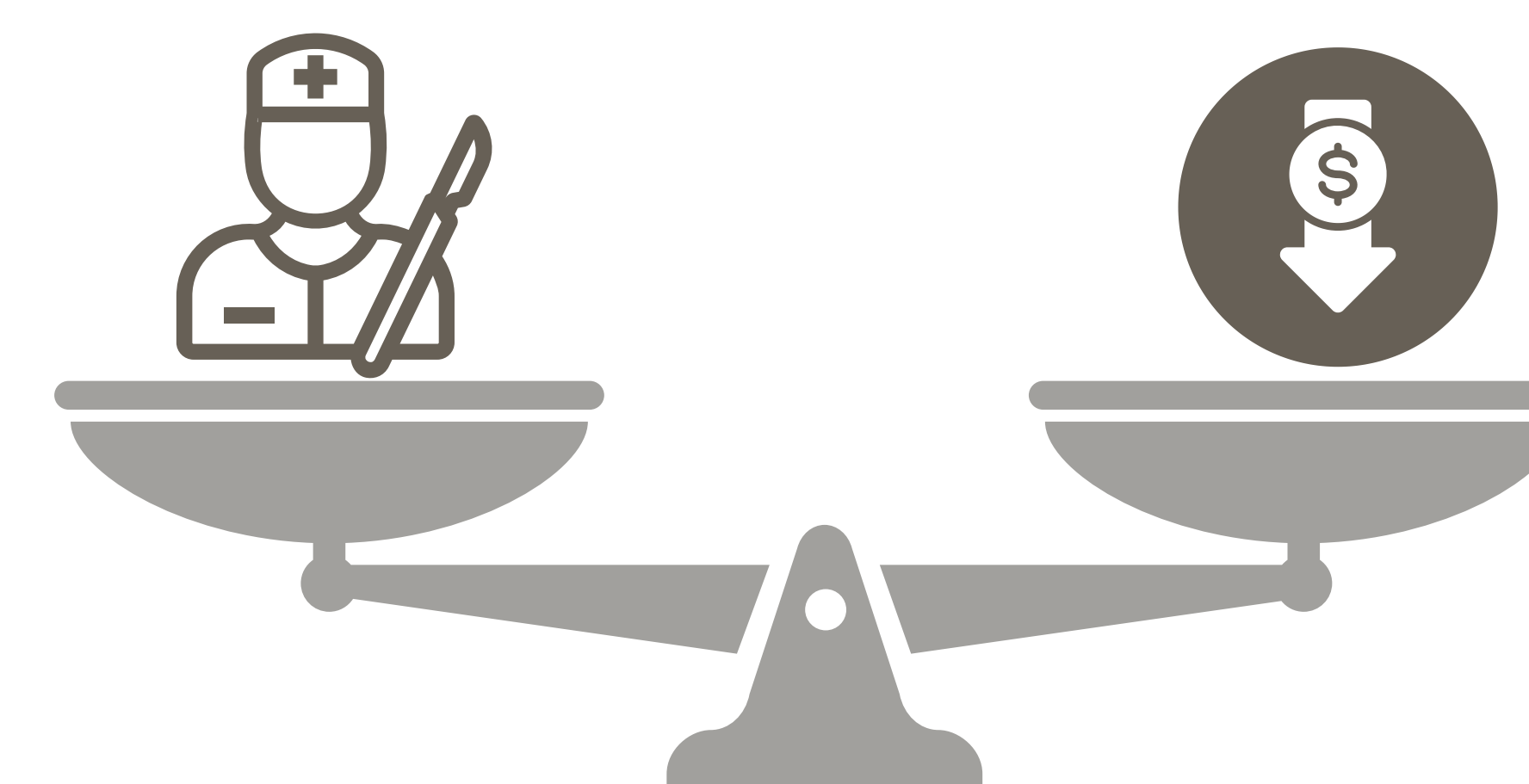
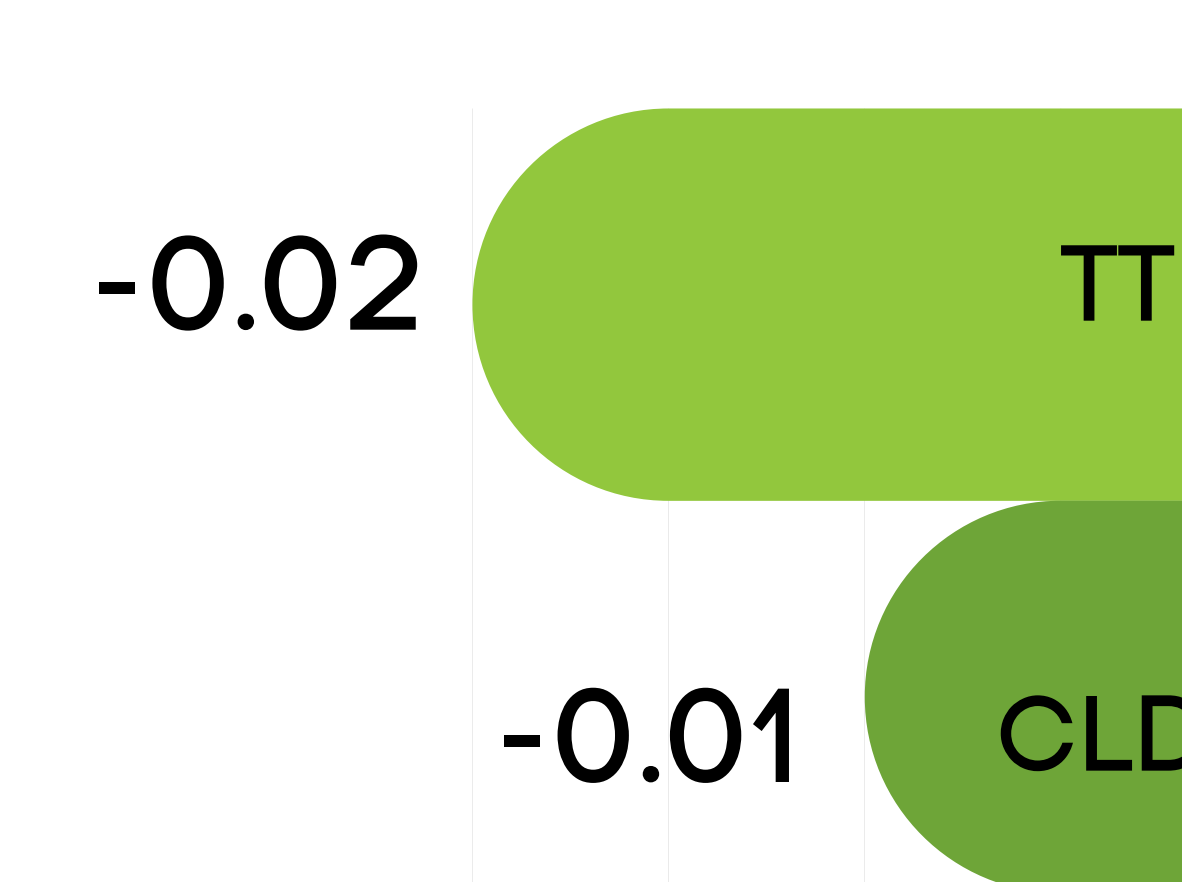
Prevent needless surgery



Cost



Utility (QALY)



Those strategies can prevent unnecessary surgeries in elderly, but shunt procedure may not be performed in others who would benefit from it.

