

A Pilot Trial Of Value-Based Pricing For Medical Devices

Liang LIN¹, Hong JU¹, Swee Sung SOON¹, Kwong NG¹

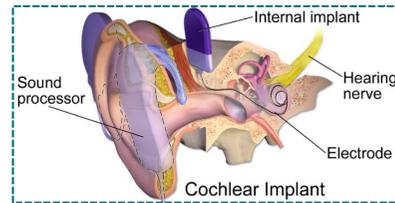
¹Agency for Care Effectiveness (ACE), Ministry of Health, Singapore

1 INTRODUCTION

- Countries globally are facing unsustainable increases in the cost of healthcare, and medical technologies are a key driver of long-term costs.
- To get the best value for the healthcare dollar, medical technologies need to demonstrate better outcomes and/or lower costs.

2 OBJECTIVE

To ensure value for bilateral cochlear implants (BCI) in children with severe-to-profound hearing loss in both ears.



3 METHOD

Health technology assessment (HTA) of BCI was conducted to assess the following for subsidy decision-making:

- clinical need;
- clinical benefits;
- cost-effectiveness;
- budget impact; organizational feasibility; and
- other considerations.

Value-based pricing (VBP) was trialed to increase the likelihood of BCI being cost-effective.

➔ **Instead of limiting to the lowest cost CI brand, a target price was used for VBP negotiations with all companies as user competency is relevant to patient outcomes in the devices space.**

4 RESULTS

- All companies agreed to lower prices and met target price.
- VBP brought prices to an acceptable level for subsidies to be applied and improved affordability for the patients and healthcare system.

Table 1. Impact of VBP

	BEFORE VBP	AFTER VBP
Incremental cost-effectiveness ratio	~USD 55,000 to 77,000 per QALY gained	~USD 11,000 to 33,000 per QALY gained
Budget impact	~USD 1 to 3 million	Below USD 1 million

QALY: quality-adjusted life-year

Subsidy of all models that met the target price helped overcome issues such as dependency of outcomes on user training and competency.



5 CONCLUSION

- **The HTA and VBP pilot work for CI helped achieve better value.**
- Following this trial, ACE is exploring the feasibility to extend VBP to other high-cost devices.
- **Success of VBP contributes to an affordable and sustainable healthcare system in Singapore.**