

## Original Article

### Costs of receiving developmental services for children with global developmental delay at

#### Siriraj Hospital in Bangkok, Thailand

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#### Abstract

**Objective:** To identify the cost from the societal, caregiver, and hospital perspectives for receiving developmental services for children with global developmental delay (GDD) at Siriraj Hospital.

**Methods:** This descriptive study collected data from children under 5 years old with GDD from

November, 2021 to October, 2022. The hospital's perspective cost and caregivers' direct medical

costs were obtained from the Siriraj database. Caregivers were interviewed about their expenses

for direct nonmedical and indirect costs. Caregivers and hospital perspective costs were summed

to total societal perspective.

**Results:** Of the 100 caregivers, most (39%) of their children had universal coverage; however, 22% did not have any healthcare coverage. The median annual cost of the societal perspective was 200.42 (range 13.64 - 2,141.31) USD/ child. Median annual caregivers' perspective, direct medical, direct nonmedical and indirect costs were 119.82 (range 9.20 - 2,068.91), 0 (range 0 - 231.89), 68.96 (range 2.87 - 2,068.91), and 0 (0 - 1,293.07) USD/ child, respectively. The mean proportion of the expenses of each child among direct medical, direct nonmedical and indirect costs was 11:71:18. The median annual hospital perspective cost was 103.67 (range 4.31 - 896.81) USD/ child.

**Conclusion:** Although the annual cost of the societal perspective was 200.42, the caregiver's and the hospital's perspective were 119.82, and 103.67 USD/ child, respectively. The direct nonmedical cost, especially transportation one, was the largest proportion of the total cost from the caregiver's perspective. Effective referral system is crucial for alleviation of this burden.

**Keywords:** cost identification, developmental service cost, economic burden, global developmental delay