

# Assistive Technology Services for Persons with Mobility Disabilities in Governmental Hospitals, Thailand

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## Introduction:

- ❖ In Thailand, assistive technology is mostly available in healthcare system.
- ❖ According to the Disability Survey in 2022 reported that 16.6% of PWDs reported that they need a device but don't get one from governmental sectors.
- ❖ Governmental hospitals provide assistive product services according to pricelists of three major medical schemes.

## ❖ Inclusion criteria include

- (1) governmental hospitals where belong to the Ministry of Public Health.
  - (2) at least one rehabilitation professional is involved in assistive technology provision.
  - (3) assistive products for persons with mobility disabilities are provided.
- ❖ Stage 2: a rehabilitation professional from each hospital who have at least six-month experiences in providing assistive technology services was selected to answer a self-administered questionnaire.

## Objectives:

To study the situations of assistive technology services in governmental hospitals, Thailand.

## Methods:

- The survey research study was conducted. Samples from governmental hospitals were selected using a multistage sampling method.
- Stage 1: two hospitals were selected from each province using a purposive sampling method.

## Results:

- 78 respondents from 56 provinces responded to the survey.
- Those were from secondary and tertiary care hospitals including provincial hospitals (26, 33.3%), regional hospitals (22, 28.2%), general hospitals (15, 19.3%), and community hospitals (15, 19.3%) (Table 1).

**Table 1. Hospital levels and Rehabilitation Personnel in the Included Hospitals**

Hospital levels	number of hospitals n(%)	PM&R n(%)	PT n(%)	OT n(%)	P&O n(%)	Others* n(%)
Regional hospitals	22 (28.2)	22 (100.0)	22 (100.0)	21 (95.5)	22 (100.0)	16 (72.7)
Provincial hospitals	26 (33.3)	18 (69.2)	26 (100.0)	15 (57.7)	20 (76.9)	15 (57.7)
General hospitals	15 (19.3)	8 (53.3)	15 (100.0)	7 (46.7)	4 (26.7)	9 (60.0)
Community hospitals	15 (19.3)	1 (7.1)	15 (100.0)	7 (46.7)	0 (0.0)	7 (46.7)
<b>Total</b>	<b>78 (100.0)</b>	<b>49 (100.0)</b>	<b>78 (100.0)</b>	<b>50 (100.0)</b>	<b>46 (100.0)</b>	<b>47 (100.0)</b>

\* Including P&O technicians, rehabilitation officers, social workers, nurses, and nurse aids.

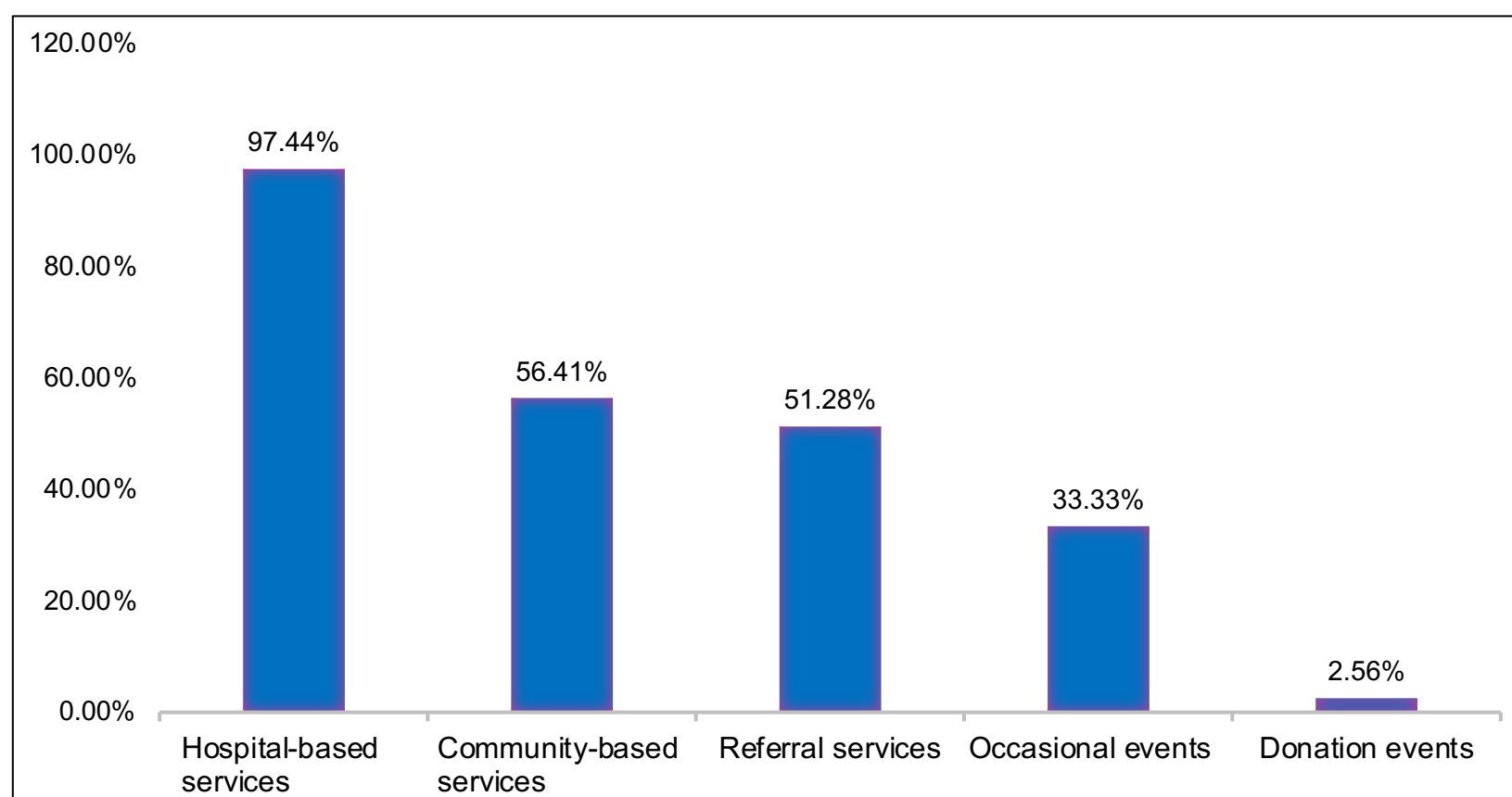
- Considering personnel, physical therapists seem to be the main rehabilitation personnel in all hospital levels, while occupational therapists, PM&R doctors, and prosthetics and orthotics were mainly involved in regional and general hospitals.
- Basic mobility devices were provided in all respondent settings. Walking aids (77,98.7%) and wheelchairs (69,88.5%) were provided in most hospitals. However, products for self-care were rarely available in those settings.
- Just above half of the included hospitals provide self-catheters (41,52.6%). While devices for activities of daily livings (ADLs) were provided according to availability of occupational therapists.

- Regarding service delivery, assistive products were provided by hospital-based service (97.4%), community-based service (56.4%), referral system (51.3%), and occasional events (33.3%) (Figure 1).
- Prescription, fitting, and training were reported by all respondents. However, 61.5% of those reported that repair services were provided in their hospitals.
- Concerning funding for the assistive technology services among the included hospitals, it was found that those assistive products are from more than one source including hospital budget (80.8%), Sirindhorn National Medical Rehabilitation Institute (SNMRI) (51.3%), provincial rehabilitation funds (42.3%), and donations (28.2%) (Figure 2).

**Table 2. Assistive Products Provided in the Included Hospitals**

Products	n (N=78)	(%)
<b>1. Products for Mobility</b>		
- Wheelchairs	69	88.5
- Cushions	28	35.9
- Walking aids	77	98.7
- Upper limb prostheses	32	41.0
- Lower limb prostheses	58	74.4
- Orthoses	56	71.8
- Orthopedic shoes	31	39.7
- Others (i.e. Tricycles, Liner for wounded stump, and Shoulder sling)	6	7.7
<b>2. Products for Self-Care</b>		
- Devices for feeding	35	44.9
- Devices for drinking	11	14.1
- Devices for hygiene	7	9.0
- Devices for dressing	7	9.0
- Devices for toileting	14	18.0
- Self-catheters	41	52.6

**Figure 1. Funding for The Assistive Technology Services Among the Included Hospitals**



### Discussion:

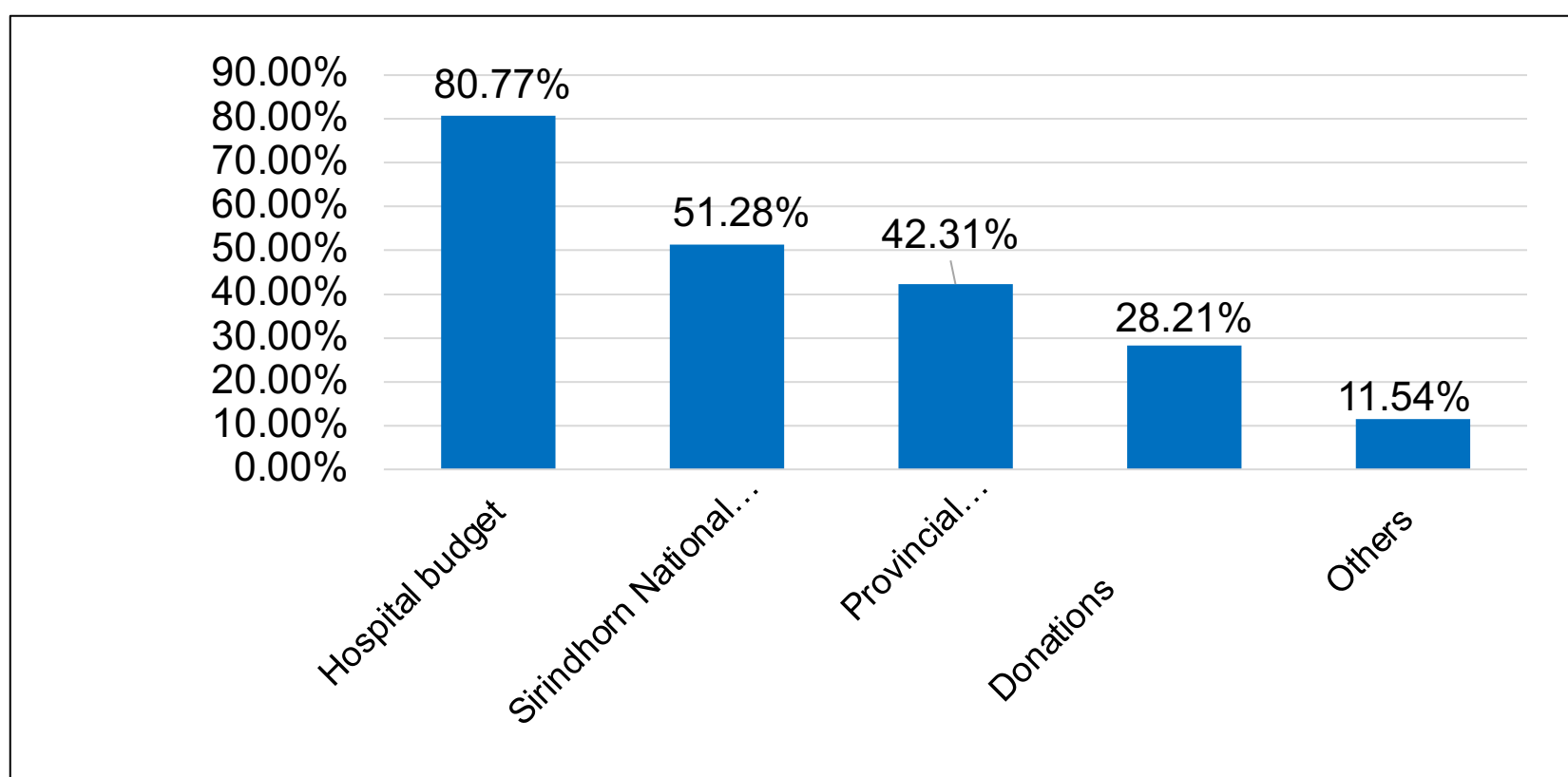
- ❖ Assistive technology services for persons with mobility disabilities were mainly accessible in regional and general hospitals and according to availability of rehabilitation personnel.
- ❖ Mobility devices are available in most hospitals, while devices for ADLs are limited access.
- ❖ Shortage of OT in Thailand might be one of the major reasons leading to low access to those ADLs products.
- ❖ As hospital-based services were the main service delivery models, referral system might be promoted to support people access to assistive products needed.

- ❖ Even though many sources of budget for assistive technology services were identified, those could be reimbursed for only the products on the pricelists which devices for ADLs were not included.

### Conclusion:

In order to fill this gap, not just increase number of OT practitioners, but increased awareness and capacity building among health personnel might be important solutions for improving accessibility of AT for persons with disabilities in Thailand.

**Figure 2. Funding for The Assistive Technology Services Among the Included Hospitals**



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