

Hand in Hand: A pilot project for right siting of paediatric neurodevelopmental services in Singapore

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Introduction

Singapore has recognized the importance of early intervention and early childhood special education for children with neurodevelopmental conditions in recent years and increased accessibility to EIPIC (early intervention programme for infants and children) centres and special education schools. EIPIC provides an opportunity to maximise the developmental potential of each child by providing holistic and individualised developmental programmes. Due to the lack of standardised model of care for children requiring long-term therapy services in Singapore, children often receive a duplication of services in acute hospitals and in EIPIC centres.

High waiting time for Physiotherapy in the department may be attributed to children requiring long term therapy services and receiving duplication of services in the acute and community setting. This pilot project was initiated by KKH physiotherapists to facilitate the right siting of paediatric patients to ensure the continuation of care into the community, and in so doing, also improve therapy waiting times at the Physiotherapy department.

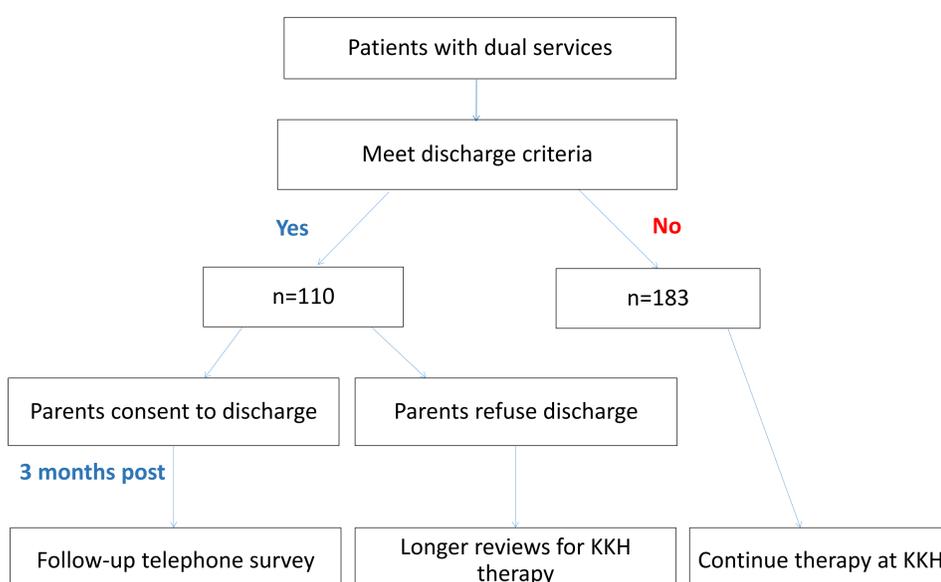
Methods

- Workgroup of physiotherapists from KKH, EIPIC centres and special education school physiotherapists formed in March 2017 to identify gaps in transiting neurodevelopmental services from acute hospital into the community.
- Discharge criteria (Table 1) was identified and a workflow on discharge processes was implemented (Figure 1).
- Communication consent form was developed.
- Doctors started providing memos with updated medical diagnosis for school therapists at outpatient clinics.
- Post discharge telephone surveys done 3 months post discharge.

Table 1. Discharge criteria

Discharge criteria	Exceptions to discharge
Attending EIPIC with Physiotherapy services	Patients post surgery or Botox requiring intensive physiotherapy
Attending special school with Physiotherapy services	Patients requiring hydrotherapy
Start AWWA Community Integrated Service with Physiotherapy services	Patients requiring casting
Patients transitioned to adult services	
Children currently receiving Physiotherapy regularly at special schools/AWWA CIS/Private therapy	

Figure 1. Discharge workflow



Results

- 293 children found to be receiving dual services as of May 2017.
- 110 children met discharge criteria.
- 22.7% (Table 2) were successfully discharged to continue their care in the community by January 2018.
- 25 surveys were conducted over the phone from June 2017 to March 2018.
- Mean scores presented in Table 3.
- Reasons for the duplication in services included patients requiring equipment prescription, botulin toxin injections or surgery.
- 57 % of parents reported feeling satisfied with their transition into the community.

Table 2. Proportion of patients discharged

	May –July 2017	Aug-Oct 2017	Nov-Dec 2017	Total to date
Actual number of patients discharged	12	3	10	25
Percentage of discharges (actual/identified)	10.9%	2.7%	9.1%	22.7%

Table 3. Mean scores of parent surveys

Questions	Average score
To what extent do you feel your child's gross motor skills have improved over the past 2 months?	4
To what extent do the physiotherapists who work with your child provide you with written information about what your child is doing developmentally?	4
To what extent do the physiotherapists who work with your child look at the needs of your whole child (e.g. at mental, emotional and social needs) instead of just at physical needs?	5
To what extent do the physiotherapist who work with your child fully explain service choices to you?	4
To what extent do the physiotherapist who work with your child provide enough time to talk so you don't feel rushed?	4
To what extent does the organization where you receive services give you information about the types of services offered at the organization or in your community?	4

Likert scale (0-7): 0-Not applicable; 1-Not at all; 2-To a very small extent; 3-To a small extent; 4-To a moderate extent; 5-To a fairly great extent; 6-To a great extent; 7-To a very great extent

Conclusion

The project has successfully right sited 22.7% of patients with dual services resulting in less fragmented care and better, streamlined treatment. Waiting time for physiotherapy services has reduced, improving services for those who require it. Communication between the hospital and community centres has improved for continuation of patient care. Looking ahead, we hope to improve the model of care with right siting of patients who require continuation of care in the community and improving the accessibility of physiotherapy services for the acute and subacute patients who require early intervention and neurodevelopment.

