



# **A New Trial of All Rental Wheel Chairs and Walking Aid Devices in Kaihukuki(subacute)Rehabilitation Hospital**

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# Introduction

In Japan, wheel chairs and walking aid devices have been under estimated as rehabilitation devices. We have tried and continued that those devices should be employed suitably, comfortably fitted for the patients with multiple, various diseases and conditions during rehabilitation process ward to return to th

# Method and Objects

Our hospital 225 beds. Total 1135 patients every year are treated 60% CVA 40% Locomotive, except Children cases.

Our new trial of all rental wheelchair chairs and walking aid devices is designed to deliver within three days when the patients are admitted in the hospital with precise maintenance and sanitation.

Evaluation of satisfaction was done by QUEST version 2.

The order sheet

Fax Order

Aijinkai Rehabi → Aktingone Hspu Smile Sup

オーダーリスト

愛仁会リハビリテーション病院 様 ⇄ 近鉄スマイルサプライ株式会社		FAX:	TEL:	
近鉄スマイルサプライ株式会社 宛				
TEL:	発注先FAX			
平成 年 月 日				
ご利用者	フリガナ	愛仁会リハビリテーション病院 ご担当者		
	氏名			
	生年月日	M・T・S	年 月 日(満 歳)	女・男
	搬入希望日	平成 年 月 日( )	午前	午後
	身体状況	身長 cm	体重 kg	
	麻痺 無	有 の場合は(右・左)		
	考慮すべき身体状況			
	座位臀幅(座面幅)	座底長(座面奥行)	前座高	
使用用具	車いす	<input type="checkbox"/> モジュール	※指定があれば	
		<input type="checkbox"/> チルト&リクライニング	※指定があれば	
		<input type="checkbox"/> 簡易型		
		<input type="checkbox"/> オプション		
	歩行器	下肢駆動(足こぎ) する しない		
近鉄スマイルサプライより返信		平成 年 月 日(午前 午後)	時 頃	
		搬入にお伺いします。 担当者		
近鉄スマイルサプライ㈱ 使用欄		営業	入出庫	
			受付	

Patients Name  
 Date of Birth/Female  
 Height Body Weight  
 Paralysis W/C  
 Modular /Standard  
 Tilt & Reclining  
 Option  
 Walking aid device  
 Date of delivery

# Flow Chart of Rent all System

Total Assessment and body measurement  
on the day of admission



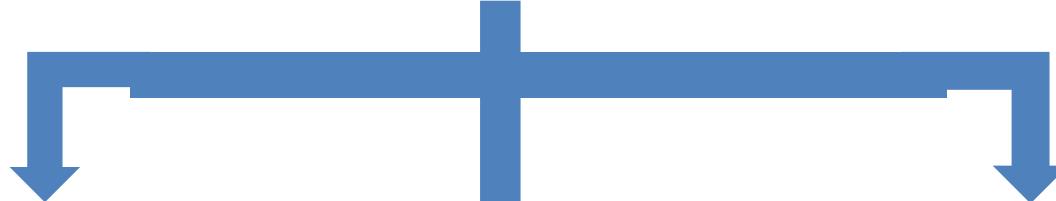
FAX Order (mainly modular wheel



Delivery of devices  
Within 3 days



Fitting the devices to the patient  
among Dr, PT, OT, PO  
Additional options



Walking Aid devices      Exchange to Welfare care  
Return equipment

# Maintenance and check



# F i t t i n g   t h e   p a t i o n s t o



# R e s u l t s

At the beginning of this system, we conducted a comparison between rental devices ( $n=28$ ) and ordered devices ( $n=22$ ). There were no significant differences.

Comparison between Rental W/C and ordered W/C		Rental	Ordered
QUEST	Total Satisfaction score	4.38	4.3
	Satisfaction score as Welfare device	4.37	4.3
	Satisfaction score of Services	4.46	4.36

# Satisfaction results using b

	Objects	Rental N= 63	Technoaid 2010 Repo rt
Total Score	Total Satisfaction	4.31	3.8
	Satisfaction Score as Welfare Devices	4.29	3.8
	Satisfaction Score of Service	4.48	4
QUEST each item	size	4.18	
	weight	4.03	
	adjustment	4.26	
	safety	4.47	
	endurance	4.33	
	utilize	4.21	
	comfort	4.41	
	effectiveness	4.3	
	the period of obtaining	4.48	
	repair and maintenance	4.55	
	advice from professionals	4.48	
	After service	4.5	

# satisfaction of each therapist(PT)

【satisfaction of physical therapist】	1st year carrier	2nd year carrier	3rd year carrier	4th year carrier	5th year carrier ~	Average of each item	
size	4.75	3.50	4.71	4.33	4.50	4.50	
weight	4.67	4.75	4.57	5.00	4.50	4.66	
adjustment	4.58	3.50	4.29	3.67	3.80	4.16	
safety	4.83	3.75	4.57	4.33	4.17	4.47	
endurance	4.92	4.25	4.86	4.33	4.50	4.69	
utility	4.75	4.75	4.57	5.00	4.33	4.66	
comfort	4.75	4.50	4.29	3.67	4.00	4.38	
effectiveness	4.83	4.75	4.86	5.00	4.00	4.69	
the period of obtaining	4.50	4.25	4.29	4.00	4.50	4.38	
maintenance	4.83	4.25	4.71	5.00	4.50	4.69	
advice from professionals	4.92	4.25	4.57	4.33	4.50	4.63	
After service	4.75	4.25	4.57	5.00	4.33	4.59	
	4.76	4.23	4.57	4.47	4.30	4.54	Total average

# satisfaction of each therapist(OT)

【satisfaction of

occupational therapist】

	1st year carrier	2nd year carrier	3rd year carrier	4th year carrier	5th year carrier ~	Average of each item	
size	3.00	4.71	5.00	4.29	4.50	4.48	
weight	5.00	5.00	5.00	4.14	4.13	4.48	
adjustment	3.00	5.00	5.00	3.71	4.25	4.32	
safety	3.00	4.71	5.00	4.43	4.25	4.44	
endurance	4.00	5.00	5.00	4.57	4.50	4.68	
utility	4.00	4.57	5.00	4.14	4.13	4.32	
comfort	4.00	5.00	5.00	3.71	4.38	4.40	
effectiveness	4.00	5.00	5.00	4.00	4.25	4.44	
the period of obtaining	4.00	4.86	4.50	3.14	4.25	4.12	
maintenance	4.00	4.43	5.00	3.43	4.50	4.17	
advice from professionals	4.00	3.86	5.00	2.71	3.38	3.42	
After service	4.00	4.00	3.00	3.14	4.25	3.76	
	3.83	4.68	4.79	3.79	4.23	4.25	Total average

# Wa r e h o u s e



**before**



**after**

# Temporary using **(leaviment)**



# Line up of Ren tal Devices



# D i s c u s s i o n

- Not hospital equipment  
**as Rehabilitation device**
- Superior devices with multi sizes adapting the patient various diseases and conditions
- Not adapt the patients to
- Seamless using from the hospital to the community

# D i s c u s s i o n

What are our all rental system merits?

1, save temporal efforts for fitting

2, save special cares for maintenance

3, reuse ecological merits

4, save the big warehouse or space in the hospital

What are the demerits of our system?

1. We need the tight community support and connection

2. We can not compensate the cost of rental assistive devices in medical insulations

# Conclusion

- 1. QUEST version 2 is a very useful method to measure the satisfaction of patients who are accustomed with wheel chairs and walking aid devices.**
- 2. The comparison between rental devices and original those devices showed almost equal and no inferiority of satisfaction.**
- 3. During five years experiences, satisfactions of each therapist showed significant differences in the fitting skill.**
- 4. Our trial showed the limitation of seamless using for the several patients who are accustomed with wheel chairs and walking aid devices from the hospital to their home.**
- 5. We hope that those devices should be positioned to the ordinary process of Rehabilitation among medical insurance.**

# COI

The authors have affiliation with rental devices, which Kintetsu Smile Supply Co, Ltd is located in Osaka, usually dealing with the assistive devices mainly in care insurance field, without the company's advisory board nor similar committee and financial fees