National Quality Improvement Conference

Improving Daily Out of Bed Activities for Spinal Cord Injured Patients at Rehab

Ms Chloe Lin Na-ling Ms Ong Chui Ni chloe_nl_lin@ttsh.com.sg chui_ni_ong@ttsh.com.sg



Problem Statement

- Cardiovascular disease is one of the major causes of morbidity and mortality in persons with SCI (Manns PJ, 1999; Noreau L, 1993)
- Physical activity is low in the inpatient
 SCI rehabilitation setting outside of structured therapy (Dominik Zbogar, 2016)

Potential Solutions													
Root Cause	Intervention												
Referral for sit out bed program is ad-hoc (Nurse	PDSA 1A: Standardization of order referral - improving communication between												

 At TTSH Rehab, only a median of 29% of Spinal Cord Injured (SCI) patients were actively mobilised out of bed.

Project Aim

To increase the percentage of *spinal cord injured (SCI) patients to achieve daily 30-minute out of bed #leisure activities at Rehab from median 29% to 70% over a sustained period * Patient who requires more than min assist (A1) for transfer to chair/wheelchair, including used of equipment (transfer board/hoist/sara steady).

Any physical/leisure activities out of therapy time (eg. watch TV, reading book, having meals out of bed).

Lessons Learnt

uncuro if nationt	different professionals									
unsure if patient is fit to sit out of bed)	PDSA 1B : To increase visibility of patient's transfer status and sitting tolerance at ward									
The program for	PDSA 2A : To have a structured program to sit out during meal time									
spinal cord injury patient at ward is ad-hoc	PDSA 2B : Manpower allocation to sit patient out (therapist assistant to help out during lunch and dinner)									

Outcomes & Impacts Monthly Runchart: Percentage of Patient who Sit Out of Bed for 30 mins for Leisure Activity Baseline Period: July 2019 to April 2022 Median (Jul to No 100% 2019) = 29% Post-Intervention Mediar 90% (Dec 2019 to Apr 2022) : out of bed w08 me activity **= 100%** Target = 70%

1. It's important to listen to ground challenges

and to implement solutions that facilitate

work processes

2. Multidisciplinary collaborative approach will enable us to look at problems from different

perspectives

To rely on system level changes rather than people driven changes

ent fins f			[18	Nov	2019	9] PI	DSA	2B	: Ma	npo	wer	allo	cati	on t	o sit	: pat	ient	out	(the	erapi	ist a	ssist	ant	to h	elp	out	duri	ng lu	unch	n and	l dinn	er)
0 mi		[11 Nov 2019] PDSA 2A: To have a structured program to sit out during meal time																														
6 of 50%		Ľ	7 No	v 20	19] F	PDSA	\ 1B	: In	creas	se v	isibi	lity	of p	atie	nt′s	tran	sfer	stat	us a	nd s	sittin	ig to	lera	nce	at v	vard	l via	hea	dbo	ard		
10%	-	29	Oct	201	9] PD	SA :	1A :	Star	ndard	lize	refe	rral	ord	er																		
0%			·	1	1			1		1	1	1			1			-	1	-		1	1	1	1			1	-			
	Jul-19 Aug-19 Sep-19 Oct-19	Nov-19	Dec-19	Jan-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22		

 GOOD OUTCOME: Percentage of SCI patients achieving a 30-min leisure activities out of bed daily from median of 33% to 100% from Jul '19 to Nov '20. This was <u>sustained</u> <u>at 100%</u> till April '22 and become <u>routine work process</u> till now.

- BALANCE MEASURE: No serious reportable events due to postural hypotension and no pressure sores developed.
- VALUE: Projected savings of \$22,712 for a 68 days rehab length of stay saved.