





HOME OF SIDNEY KIMMEL MEDICAL COLLEGE

# What's the Problem?

COVID19 patients are at risk for becoming quickly deconditioned, especially in the hospital setting given the nature of the virus and those that get admitted. The concern for deconditioning stems from patients being confined to their room, the need to minimize exposure healthcare amongst providers and the need to conserve PPE.

wanted to find ways to optimize We opportunities for patient mobility, maintain patient and provider safety, all while conserving PPE. We reviewed the Chinese Rehabilitation Association Medicine Of guidelines to help develop the exercise program.

## Cause analysis

Root causes of this problem included:

- Evolving understanding of ideal time to initiate PT and/or OT for patients with COVID-19.
- Differences in provider mobilize patients.
- Lack of established standardized exercise programs that could be shared with patients by any provider.
- Evolving understanding of appropriate PT and/or OT consults pre-COVID-19 and during COVID-19.
- Lack of common language for patients' mobility status.

### Use of Mobility and Exercise Videos during COVID-19 to Minimize Deconditioning Nethra Ankam, MD, Tulasi Gude, MD, Courtney Back, PT, Monina Florendo, PT, Elizabeth Hearn, PT, Morgan Miller PT, Kristen Stout, PT

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## How Might We: Improve mobility of patients with COVID-19 to minimize deconditioning, improve quality of life and decrease LOS.

We developed a standardized supine, seated and standing exercise program with handouts and videos that complemented each. Handouts were created using VHI computer software and provided to RN managers and therapy staff. Videos were loaded onto Jefferson Health YouTube for patients to access on IPads in the room and upon d/c home.

Lefferson Health.		د 🔔	lefferson Heal	th.			
Department of Re Acute Care Progra	hab Medicine m		Мо	dified Borg Dyspnea Scale			
EXERCISE GUIDELINES WITH COVID-19		7		ve measure on "how hard this activity feels t rt of breath' you feel. <b>You want to stay</b> ≤			
Gentle exercises can be done if	s		0	No exertion/ breathlessness			
1. You have checked in with your nurse to make sure it is ok 2. You maintain a <b>Shortness of Breath Rating</b> $\leq 3$ on the Borg Dyspne	a Scale		0.5	Very, very light (like you are sitting on a	couch)		
2. Tou maintain a Shorthess of Dreath rating 2.3 on the borg byophe			1	Very light			
<ul> <li><u>STOP</u> exercises and notify your nurse if you experience ANY of these sympto</li> <li>Increase in shortness of breath; rating &gt; 4</li> </ul>	ms:		2	Light			
<ol> <li>Chest Pain</li> <li>Palpitations</li> </ol>			3	Moderate (a bit more short of breath but can still t	alk easily)		
4. Exhaustion/fatigue							
5. Dizziness or lightheadedness			4	Somewhat hard (more short of breath and difficulty talking) STOP!			
Breathing Exercises			5	Hard			
Pursed Lip Breathing - Lying Down or Sitting in Chair Abdominal Breathing - Lying Down or Breathe slowly and gently in	Si		6				
through nose and out through pursed lips (as if making a	Jefferson Health.		7	Very Hard	Jefferson	Health	
andle flame flicker, or lowing a hair off your lip).	Shoulder flexion Supine	Exercises Plantar / Dorsiflexid	ion 8		Shoulder Flexion	Standin (**)	ng Exer
reathe out for at least vice as long as you reathe in. Place one hand on stomach. Breathe in a letting stomach rise. Breathe out gently letting stomach fall.			9	Very, very hard	From standing or sitting position, place arms at	(B)	
epeat <u>10</u> times, 2-3 times daily. Repeat <u>10</u> times, <u>2-3</u> times daily. Repeat <u>10</u> times, <u>2-3</u> times daily.			10	Maximal	sides, palms forward. Slowly raise arms over head until	· (int)	Using march with o
ppyright© 1999-2005 VH1			OP activi	ty any time your rating is at a 4 or	stretch is felt. You can one arm at a time.	" N. L	
OME OF SIDNEY KIMMEL MEDICAL COLLEGE	Arms at sides, palms down. Lift one arm over head to alongside ear, keeping elbow straight.	With right leg relaxed, gently flex and extend ankle. Move through full range of motion. Avoid pain. Repeat on left side.	NEY KIMMEL ME	DICAL COLLEGE	Repeat 5-10 times.	9/3	
	Return arm to side. Repeat with other arm. Repeat 5-10 times per side. Perform 2-3 times per day.	Repeat 5-10 times per set. Do 2-3 sessions per day.			Do <u>2-3</u> sessions per o	day.	Do
	Buttock Squeeze	Hip Abduction / Adduction:			Knee Bend	(D)	Hip B
	ton ) - A						Using keep 1
					Holding a chair for bala bend knees. Keep	nce, slowly	apart ward. leg ba
		Store Store			both feet on the floor.	G.A.	straig forwa
	On back, knees straight, legs together, not rotated outward. Squeezing buttocks together, say tight, tighter, tightest, or	Bring right leg out to side and return. Keep knee straight. Repeat on left				23	2
	count 1, 2, 3. Hold <u>3-5</u> seconds. Relax. Repeat <u>5-10</u> times.	Repeat 5-10 times per leg. Do2-3_ sessions per day.			Repeat <u>5-10</u> times. Do <u>2-3</u> sessions per	day.	Repe Do
	Heel Slide (Supine)	Straight Leg Raise			Hip Side Kick	0	Sit to
	a Anno				Holding a chair for bala keep legs shoulder widt	ince,	
		e san the			apart and toes pointed forward. Swing a leg out to side, keeping	KA "	Sit o on fl
	A marine		2		knee straight. Do not lean.	The	exten
	Slide right heel toward buttocks until a gentle stretch is felt.	Tighten muscles on front of right thigh, then lift leg off the surface, keeping knee locked. Repeat on left. Repeat 5-10 times per leg.			Repeat using other leg.		2
	Hold 3 seconds. Relax. Repeat on left side. Repeat 5-10 times each leg.	Do2-3 sessions per day. Be mindful not to hold your breath.			Repeat <u>5-10</u> times. Do <u>2-3</u> sessions per	day.	Repe Do Do
	Do2-3 sessions per day. HOME OF SIDNEY KIMMEL MEDICAL COLLEGE				the second se	MMEL MEDICAL COLLEGE	

comfort to

#### We also developed a step by step video on how to mobilize a patient requiring minimal assist from supine to sitting EOB to standing and then back to supine. The video was shared with nursing and housestaff and placed on MYJeffHub as a resource.

Videos can be found at: Inpatient Exercises - https://www.youtube.com/playlist?list=PLq-eEddi\_wgGA\_zZAF-5q-KuzBxYOKkw6 Mobilizing COVID -19 Patients https://jam8.sapjam.com/groups/V6DNNXT1ZN1xRM1VUUmsws/content?folder\_id=TT1Mvcglkm6dwMYXyKJf3A

