

Covid 19 rehabilitation strategy

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Premise:

- Hospital bed scarcity will be exacerbated by persons with Covid-19 who are unable to leave due to disability.
- Our work in Disaster Rehabilitation shows that aggressive early medical rehabilitation can result in earlier discharge
- Acute hospitals and especially makeshift hospitals have little structure and few staff for sophisticated multidisciplinary rehabilitation
- A protocol and resources that recognize these limits can speed discharge and improve outcomes.

Disability comes from many sources:

- Covid-19 affects lungs and other tissues
- Treatment results in complications ranging from stroke to heart disease
- Weeks in bed results in deconditioning syndrome (low blood pressure, weakness, balance problems, cognitive and emotional problems and anorexia.
- The population treated has a high prevalence of premorbid disabling conditions
- Scarce resources result in complications ranging from pressure sores to contractures to bladder infections to increased falls

Limited resources include:

- Essentially no rehabilitation medicine doctors (they're in crisis handling inpatient rehab)
- Very limited therapy professionals (overused, sick, plus very low efficiency due to isolation)
- Overstretched nursing resources with little time to assess or teach
- Limited rehabilitation supplies
- Limited direct family contact

Advantages:

- Most patients are cognitively intact
- The public (the patients) have access to video and audio internet communication
- Consultations can be done by telemedicine
- Family are often more available with little else to do.

Strategy:

- Patient/family fill out The Covid-19 Screening Tool (CRST) on admission and weekly

- Nursing screens CRST weekly and considers interventions
- Patient and family both receive the 'Getting Home After Covid-19' pamphlet.
- Hospital wards have weekly 'Getting Home After Covid-19' patient teaching sessions online
- Hospital wards have daily 1 hour group exercise, led online
- Week of discharge patient checks off all items on CRST
- Week of discharge nursing reviews gaps in CRST and considers final interventions

At bedside:

1. A chair (sitting IS an exercise)
2. Simple weights (rubber bands or even cans of soup)
3. Patient's cell phone, Ipad or other device connected to internet and charged
4. Transfer belt and sliding board (fewer nursing injuries and falls)
5. 'Getting Home After Covid-19' poster up where visible to patient
6. Tentative date of discharge, discharge location, and primary home contact form visible to all staff

Resources to organize:

- Virtual Physical Medicine and Rehabilitation doctor consult
- Virtual or in-person physical therapy, occupational therapy, speech language therapy, social work, psychology.
- Rapid team triage process, primarily virtual (see Quick Program*)
- Ready supply of simple assistive devices
 - Canes
 - Walkers
 - wheelchairs
 - Ankle braces
 - Slings
 - Dressings

Relations to re-negotiate

- With acute medical rehabilitation ward/hospital
- With post-acute rehabilitation facility
- With home health agency
- With outpatient therapists including private ones
- With hospice

Relation negotiate:

- What can they handle these days
- What isolation can they handle
- New telemedicine options
- New admission and discharge processes
- Ways acute care can efficiently hand off information

Process improvement:

Assign QI to a non-clinician, even a patient advocate

Answers to nursing administrator, liaison with local rehab leader and with Andrew Haig MD

Measure:

- % CRST filled by patient, initialed by nurse on admission
- % Tentative Date of Discharge form posted on all beds on admission
- '% Getting Home After Covid-19' posted in sight of all patients
- % CRST filled by patient, initialed by nurse weekly
- % CRST Completed discharge checklist on all patients week of discharge

Process:

- Gather data weekly
- Analyze weekly for the first month, problem solve and make corrections
- Analyze monthly afterwards until not needed.
- Share de-identified information with Andrew Haig andyhaig@haigetal.com

Advanced QI if possible, at 1 and 6 months:

- Mortality
- Readmission
- Institutionalization
- Barthel Index (its in the CRST form)
- Patient satisfaction
- Family/caregiver satisfaction
- Acute care staff input
- Rehab input