Faster Discharges, Better Outcomes for COVID-19 Patients

Including expert rehabilitation from the very beginning of a health crisis means better functional outcomes for patients. The International Rehabilitation Forum’s global team of volunteer rehabilitation medicine experts has devised several tools to help hospital personnel and patients dealing with COVID-19 work towards better long-term health and a way to release beds for additional care.

Please review the suggested approach to Getting Home After COVID-19 below and visit www.RehabForum.org for additional resources, including:

- Rehab screening survey for busy nurses
- Simple patient handout that helps puts success in their own hands.
- Exercise and education videos to encourage patient rehabilitation.

We encourage free sharing of our materials, with attribution if possible.

Administrative Overview

Getting Home After COVID-19 rehabilitation strategy premise:

- Hospital bed scarcity will be exacerbated by persons with COVID-19 who are unable to leave due to disability.
- IRF 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.
• Getting Home After COVID-19 protocol and resources recognize these limits and can speed discharge and improve outcomes.

Potential disability sources:
• COVID-19 affects lungs and other tissues
• Treatment for COVID-19 can result in complications including stroke and 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 can result in complications ranging from pressure sores and contractures to bladder infections and increased falls.

Addresses limited rehabilitation resources:
• Essentially no available rehabilitation medicine doctors because it’s a small specialty and if available, they likely are handling inpatient rehab.
• Very limited therapy professionals available because they may be overused or sick, and those who are available may have very low efficiency due to patient isolation.
• Overstretched nursing resources with little time to assess or teach.
• Limited rehabilitation supplies.

Rehabilitation strategy advantages:
• Most patients are cognitively intact.
• Patients likely have access to video and audio via hospital internet connection
• Consultations can be done by telemedicine.
• Family are may be available to help.

Rehabilitation Strategy

Process
• Admission
  o Patient or family fills out the IRF COVID-19 Patient Success Tool
  o Patient and family both receive the Getting Home Handout.
• Daily
  o Getting Home Poster is visible to all patients
  o Hospital wards hold online 30-minute Getting Home Exercise Video.
  o Bedside rehabilitation strategy (see below)
• Weekly
  o Patient and Nurse discuss COVID-19 Patient Success Tool and consider discharge plans.
  o Hospital wards hold online Getting Home Patient Education sessions.
• Discharge week
  o Nurse and patient review gaps in COVID-19 Patient Success Tool and consider final interventions.
If it appears the patient may not be able to return home, nurse completes the **COVID-19 Discharge Tool** and share with rehab physician.

**Bedside rehabilitation strategy:**
- A chair (sitting IS an exercise)
- Simple weights (rubber bands or even cans of soup)
- Patient’s cell phone, iPad or other device connected to internet and charged.
- Transfer belt and sliding board (fewer nursing injuries and falls)
- *Getting Home* poster visible to patient
- Tentative date of discharge, discharge location, and primary home contact form visible to all staff.

**Rehabilitation Strategy Preparation**

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

**Necessary relations:**
- Acute medical rehabilitation ward/hospital
- Post-acute rehabilitation facility
- Home health agency
- Outpatient therapists including private ones
- Hospice

**Necessary assessment:**
- What patient can handle
- What isolation patient can handle
- What telemedicine options are available
- How admission and discharge processes can include rehab
- How acute care can efficiently hand off information

**Quality Assurance Metrics**
Process improvement strategies:
- Assign QI to a non-clinician, even a patient advocate, who answers to nursing administrator
- QI acts as liaison with local rehab leader and Andrew Haig, MD - andyhaig@haigetal.com

Measure:
- % COVID-19 Patient Screening Tool filled by patient, initialed by nurse on admission
- % Tentative Date of Discharge form posted on all beds on admission
- % Getting Home After COVID-19 poster in sight of all patients
- % Completed discharge checklist on all patients

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 Dr. Haig

Advanced QI if possible, at 1 and 6 months:
- Mortality
- Readmission
- Institutionalization
- Barthel Index (in the COVID-19 Patient Screening Tool form)
- Patient satisfaction
- Family/caregiver satisfaction
- Acute care staff input
- Rehab input

© 2020 The International Rehabilitation Forum. Not for commercial use without permission. May be reproduced freely for clinical or academic but with this copyright statement. Modifications allowed but must be noted as modifications.

The International Rehabilitation Forum (IRF) is a 501c3 organization that brings together people and institutions that have the passion, expertise and interests in solving issues abroad relating to rehabilitation medicine. It works with universities, governments, and NGOs to enhance medical rehabilitation around the world. For more information, see www.RehabForum.org.