MOVE:
Critical Care Early Progressive Mobility Protocol

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Golden Jubilee National Hospital

- Golden Jubilee National Hospital (GJNH) is home to regional and national heart and lung services
- National Waiting Times Centre
- Approximately 1400 major heart surgery procedures every year
Physiotherapy Pathway

- Gold standard routine postoperative physiotherapy pathway is 4 days
- Data from April 2014 to April 2015 showed approximately 24% of patients followed routine pathway
- 66% of patients had extended pathway between 4 - 10 days
- 10% of patients had complex recovery postoperatively >10 days in Critical Care
Physiotherapy Service Development

- **2011**: GJNH Physiotherapy team introduced Physiotherapy milestones for:
  - Education of Band 5 Physiotherapists
  - Evaluation of patient progress within Critical Care

- **2014**: Introduction of 7 day service within Rehabilitation Department:
  - Continue patient progression over 7 days
Physiotherapy milestones for long-term rehab patient’s in ICU (>72 hours)

Milestones:
1. Sitting over edge of bed
2. Static and dynamic sitting balance achieved
3. Sitting in high back chair
4. Progress to stand
5. Progress mobility

Cardiovascularly stable and appropriate conscious level

Sitting over edge of bed. Once static sitting balance achieved > 5 minutes

High back chair. Once dynamic sitting balance is achieved

Standing (assistance/mechanical support)

Walking (assistance/mechanical support)

Outcome

Discharged home

Transferred

Passed away

If not, reason:
Objective

- Wider MDT and weekend Physiotherapy staff not familiar with Physiotherapy milestones
- Objective:
  - Improve the continuity of Physiotherapy progression over the 7 days
  - Improve communication among MDT
  - Formalise standard documentation of early progressive mobilisation
Method

- Collaboration between Physiotherapist and Anaesthetist
- Physiotherapy milestones remained with extra medical and Physiotherapy dimensions added
- First draft of the protocol was devised
- Test of change carried out within Critical Care
- Protocol trialled and reviewed by MDT and Physiotherapy team
- Protocol amended and final version implemented within Critical Care
GJNH EARLY PROGRESSIVE MOBILITY PROTOCOL

Step 1 – Daily mobility safety screening

M – Myocardial Stability:
- No evidence of active myocardial ischaemia x 24hrs
- No arrhythmia requiring new anti-dysrhythmics x 24hrs

O – Oxygenation adequate (PaO2 >9kPa) on:
- FiO2 < 0.80
- PEEP < 10

V – Vasopressor(s) static or reducing dose:
- No increase of any vasopressor x 2hrs

E – Engages to voice (ability to follow instructions):
- Required for active mobilisation

MOVE (No)

Re-evaluate in 24hrs – no active movement
- Patient for:
  - Full range of passive movement x2 / day
  - Optimum bed (chair) position

MOVE (Yes)

Step 2 – Active Mobility

Step-wise progression...

Level 1
(a) Assisted bed exercises
(b) PAT slide into chair

Level 2
(a) Independently moving limbs – active / assisted exercise
(b) Sitting over edge of bed with assistance
(c) Static sitting balance for 5mins
(d) Transfer into high back chair +/- mechanical assistance

Level 3
(a) Independently moving limbs active / resisted exercises
(b) Dynamic sitting balance
(c) Sit to stand transfer practice +/- mechanical aid
(d) Standing balance
(e) Transfer into chair +/- assistance

Level 4
(a) Practice weight transference standing +/- assistance
(b) Gait re-education +/- aid
(c) Independent + aid
(d) Fully independent (RPE 1 [easy] - 10 [hard])
Results

- Protocol is being used to document and communicate patient progression in Critical Care for 100% of patients with a prolonged Critical Care stay longer than 72 hours
- MOVE chart displayed in all patient rooms in Critical Care
- MOVE chart section added to MDT daily goals sheet
**Multi-Disciplinary Daily Action Plan**

**Date:**

**Section to be completed by Staff Nurse.**

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<tr>
<th>Ventilation</th>
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<th>ABG</th>
<th>PaO₂</th>
<th>&gt;</th>
<th>PaCO₂</th>
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<td></td>
<td>RR</td>
<td>&lt;</td>
<td></td>
<td>SpO₂</td>
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**Plan**

**Delirium**

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<th>PM: Y □ N □ N/A □</th>
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**Cardiovascular**

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<th>Fluid balance</th>
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<th>Revised target</th>
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**Plan**

**Family**

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<tr>
<th>Last documented family discussion with nursing staff, Date: / /</th>
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**Additional joint medical / nursing plan:**

**Section to be completed by Physiotherapist.**

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<th>MOVE No</th>
<th>If No, comment:</th>
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<th>Target level today</th>
<th>1 a□ b□</th>
<th>2 a□ b□ c□ d□</th>
<th>3 a□ b□ c□ d□ e□</th>
<th>4 a□ b□ c□ d□</th>
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<th>If 4d: rate of perceived exertion (RPE) =</th>
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Conclusion

- The early progressive mobility protocol has been adopted throughout Critical Care
- Improved MDT communication
- Standardisation of patient progression using Physiotherapy milestones
Next Steps

- February 2016: MOVE tool on CIS electronic notes available for full MDT access
- Audit use of MOVE tool daily goals sheet within Physiotherapy team
- Review MOVE tool in 6 months
- Feedback from staff regarding progression of patients
  - Achievable?
  - Order of milestones
With thanks to Rehabilitation team & Critical Care team at Golden Jubilee National Hospital