Mobility Strategies for Adult Hospitalized Patients on Medical/Surgical and Critical Care Units
Definitions, Operationalization, and Measurements from the Evidence

Summary Statement

Clinical Question: As based on the evidence, how should mobility be defined, operationalized, and measured in the acute care setting?

Conclusion: There was wide variability in mobility interventions and strategies across care environments and their patient populations. Little information on mobility approaches was available for medical/surgical units and elderly patients in the critical care and medical/surgical setting.

Review of the Evidence: Immobility of hospitalized patients, particularly the elderly, has been linked to functional disability and dependence, as well as other negative outcomes. Early and active mobility and ambulation interventions are needed to assist adult hospitalized patients maintain their functional independence while in the acute care environment. However, nurses and other healthcare professionals are still challenged in identifying the type, duration, and frequency of mobilization needed to prevent negative patient outcomes. A review of the evidence was conducted in September 2013 to determine the effectiveness of mobility best practices/strategies, including ambulation, for adult hospitalized patients on Medical/Surgical and Critical Care Units. A subsequent examination of the previously sourced evidence was conducted in October 2013 to better articulate the definitions, measurements, and operationalization of specific mobility interventions and strategies. The results highlighted identified mobility interventions and protocols in the areas of critical care, medical/surgical, and elderly hospitalized patients.

Summary of the Evidence: There were large gaps of missing information in the Definition category, demonstrating a lack of universal definitions for many mobility strategies and interventions. Similar results were seen in the Operationalization category, which sought to articulate how a particular mobilization strategy was operationalized. The category most able to capture information from the evidence was Measurement, as seen by the multiple methods of quantifying and measuring the various mobility protocols components and interventions. There was some redundancy in the evidence that cut across categories and terms. For example, there is much similarity and few discernible differences between “Progressive Mobility” and ‘Early Activity/Mobilization.”

The promotion of assisted and independent patient activity, exercise, and movement are nursing functions that incorporate interdependent nursing activities. In the critical care environment, mobilization tends to be an assisted rather than a self-initiated activity. Although passive range of motion, passive cycling, and assisted repositioning have been included in mobility protocols, the minimal energy used suggests that these activities may not constitute mobilization at all. Given that activity thresholds can vary by person, medical condition, and previous functional status, mobilization parameters/protocols, and measurement methods must be customized for the individual patient. Nurses must be mindful that critically ill adults can take up to 10 minutes to adapt to any mobility intervention and that management of agitation is a key element of any mobility program. Interprofessional protocols utilizing a standardized and structured daily assessment of current mobility status supported the critical thinking processes of healthcare providers and obtained the most significant results. Common terminology that is understood by all healthcare providers is needed to consistently define, operationalize, and measure the strategies, interventions, and activities of mobilization programs focused on adult patients in the acute care setting.

The specific sections below will be found on the following pages:
4. Other: Definitions, Operationalization, and Measurement: Page 11
5. Legend of Abbreviations: Page 12
6. References: Pages 13 - 15

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**Clinical Question:** As based on the evidence, how should mobility be defined, operationalized, and measured in the acute care setting?

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<th>Operationalization</th>
<th>Measurement</th>
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<tr>
<td>Mobility</td>
<td>An interdisciplinary, goal-directed therapy/activity used to produce/facilitate movement and improve outcomes that involves energy expenditure and has both physical and psychological domains. In critical care, mobilization is of necessity an assisted activity.</td>
<td>An assisted activity. Mobility protocol for intubated adults in intensive care.</td>
<td>Physiologic: Biomarkers, O₂ saturation, vital signs, pulmonary function tests, etc. Monitor vital signs prior to each mobilization. Physical: Muscle strength grading, hand grip strength, degree of movement in bed, degree of movement out of bed, number of steps taken, etc. Nurse-initiated Mobility Protocol: One 20-minute episode of exercise daily for 2 to 7 days. 30-60 minute rest period beforehand. Exercise modes include: Active ROM, Passive ROM, Chair sitting, Standing, Walking. Measurement of Muscle Strength at ICU discharge: Medical Research Council Scale (scale 0-5) with a maximum score of 40 (combining left and right limb values). Scale score 5 = maximal strength on 4 muscle groups (shoulder adduction, elbow extension, hip flexion, knee extension). Measurement of Function at ICU discharge: Katz Activities of Daily Living scale (not described).</td>
</tr>
<tr>
<td>Progressive Mobility</td>
<td>A continuum of response-dependent activity involving the addition of another mobility activity or higher energy expenditure mobility activity.</td>
<td>An increase in activity over time as individual patient tolerance increases. Assess mobility levels per progressive mobility protocol.</td>
<td>Initial mobility level assessment within six to eight hours of ICU admission. Reassess mobility level at least daily; recommended at every shift change or every six hours until mobility is appropriate.</td>
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</table>
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- Reported as a component of rehabilitation
  - A series of planned movements in a sequential manner beginning at a patient’s current mobility status with a goal of returning to his/her baseline (©Advancing Nursing LLC)
  - time frames (includes mechanically ventilated patients)

- Need an objective sedation score to evaluate agitation and treat patient-specific sedation needs

- Mobility progression/level during last 24 hours as of midnight
  - Maximum; progressed; same; digressed

- Mobility level criteria includes:
  - PaO2/FiO2; PEEP; vital signs, MAP; cardiac arrhythmias or ischemia; vasopressor infusion; Sedation Scale score
  - Level I: RASS -5 to -3; Clinical stability/passive ROM
  - Level II: RASS -3 and above; Upright sitting, increased strength, moves arm against gravity
  - Level III: RASS – 1 and above; Increased trunk strength, moves leg against gravity, readiness to weight bear
  - Level IV: RASS 0 and above; Stand with minimal assistance, march in place, weight bear, transfer to chair
  - Level V: RASS 0 and above; Increase in ambulation distance, increase in ability to perform some ADLs

- Out of bed one or more times per day
- Reaching milestones:
  - Sitting at edge of bed
  - Standing
  - Marching place
  - Chair transfer
  - Walking two or more steps
  - Walking more than 30.5 meters

- Number of days to be able to:
  - Out of bed
  - Stand
  - Chair transfer
  - Ambulate 10 feet

- Activity level on last day in critical care unit
- Documentation and integration of mobility activities into electronic medical records
| Early Activity/ Mobilization<sup>1,16</sup> | Mobilization activities begun in the critical phase of illness<sup>1</sup>  
Patient is minimally able to participate with therapy, has a stable hemodynamic status, and is receiving acceptable levels of oxygen<sup>16</sup> | Progression based on patient’s functional capability and ability to tolerate prescribed activity (includes mechanically ventilated patients)<sup>16</sup>  
Each phase contains guidelines on positioning, therapeutic exercises, transfers, walking reeducation, and duration/frequency of mobility sessions, with criteria for progressing to next phase<sup>16</sup> | Phase 1: Documentation of the following activities<sup>16</sup>  
Duration: 15-30 minutes per session as tolerated<sup>16</sup>  
Frequency: X1 – X2 daily 1 to 7 days/week<sup>16</sup>  
Transfer to stretcher chair with total assistance<sup>16</sup>  
Turning side-to-side<sup>16;18</sup>  
Scooting to sitting<sup>16</sup>  
Sitting on side of bed<sup>16;17</sup>  
Leg exercises<sup>16</sup>  
Balance/coordination exercises for trunk control<sup>16</sup>  
Self-care activities<sup>16</sup>  
Unsupported sitting<sup>16;17</sup>  
Sit to stand with walker/assistance<sup>16</sup>  
Exercises<sup>17</sup> (one or a combination)  
Passive ROM<sup>16-18</sup>  
Active assisted ROM<sup>16-18</sup>  
Stretching<sup>16</sup>  
Resistance exercise on leg press, light weights (1 to 5 lbs) and/or exercise band<sup>16</sup>  
Breathing exercises<sup>16</sup> |
|---|---|---|---|
| | | | Phase 2: Documentation of the following activities<sup>16</sup>  
Duration: 15-45 minutes per session as tolerated<sup>16</sup>  
Frequency: X1 to X2 daily 5 to 7 days/week<sup>16</sup>  
Same as Phase 1, with the addition of:  
Transfer training using walker/assistance<sup>16;17</sup>  
Bedside chair<sup>16;17</sup>  
Bedside commode<sup>16;17</sup>  
Stretcher chair<sup>16</sup>  
Initiation of walking reeducation<sup>16</sup> |
| | | | Phase 3: Documentation of the following activities<sup>16</sup>  
Duration: 30-60 minutes per session as tolerated<sup>16</sup>  
Frequency: X1 to X2 daily 5 to 7 days/week<sup>16</sup>  
Same as Phase 2, with the addition of: <sup>16</sup> |
### Mobility Strategies for Adult Hospitalized Patients on Medical/Surgical and Critical Care Units

*Definitions, Operationalization, and Measurements from the Evidence*

| Continuous lateral rotation therapy (CLRT)<sup>1,2,18</sup> | Bed technology programmed and customized to individual bed-bound patient needs<sup>2</sup>  
Initiated if patient meets criteria based on institutional practice<sup>2</sup> | Rotation angle degree or percentage<sup>2</sup>  
Time interval or pause time<sup>2</sup> |
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<td>Prone positioning&lt;sup&gt;1,2,18&lt;/sup&gt;</td>
<td>Initiated if patient meets criteria based on institutional practice&lt;sup&gt;2&lt;/sup&gt;</td>
<td>Use of prone position and length of time&lt;sup&gt;2&lt;/sup&gt;</td>
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<tr>
<td>Elevate Head of Bed (HOB)&lt;sup&gt;1,2,18&lt;/sup&gt;</td>
<td>HOB elevates at specified degrees per progressive mobility protocol and time frames&lt;sup&gt;2&lt;/sup&gt;</td>
<td>HOB in degrees&lt;sup&gt;2&lt;/sup&gt; and length of time&lt;sup&gt;2&lt;/sup&gt;</td>
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</table>
| Dependent position (Legs dangling)<sup>1,2,18</sup> | Dangle legs at edge of bed per progressive mobility protocol and time frames<sup>1,2</sup> | Legs in dependent position for 15 minutes<sup>2</sup>  
Number of meals consumed while dangling<sup>2</sup> |

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Gradual withdrawal of assistance for turning, sitting, transfers to chair/commode<sup>16</sup>  
Walking reeducation outside of room with increased distance and endurance<sup>16</sup>  
- Gradual withdrawal of assistive devices<sup>16</sup>  
Phase 4: Care of patient transferred out of the ICU and are being prepared for hospital discharge. Documentation of the following activities<sup>16</sup>  
Duration: 30-60 minutes per session as tolerated<sup>16</sup>  
Frequency: X1 to X2 daily 5 to 7 days/week<sup>16</sup>  
Same as Phase 3, with the addition of:  
- Family training on bed mobility, transfer, walking<sup>16</sup>  
- Independent transfers with/without assistive device<sup>16</sup>  
- Gait reeducation on different surfaces<sup>16</sup>  
- Strength/endurance exercises:  
  - Arm ergometry<sup>16</sup>  
  - Treadmill<sup>16</sup>  
  - Stationary bike<sup>16</sup>  
  - Stairs<sup>16</sup>  
  - Inspiratory muscle training<sup>16</sup>  
Continuous lateral rotation therapy (CLRT)<sup>1,2,18</sup>  
- Bed technology programmed and customized to individual bed-bound patient needs<sup>2</sup>  
- Initiated if patient meets criteria based on institutional practice<sup>2</sup>  
Prone positioning<sup>1,2,18</sup>  
- Initiated if patient meets criteria based on institutional practice<sup>2</sup>  
Elevate Head of Bed (HOB)<sup>1,2,18</sup>  
- HOB elevates at specified degrees per progressive mobility protocol and time frames<sup>2</sup>  
Dependent position (Legs dangling)<sup>1,2,18</sup>  
- Dangle legs at edge of bed per progressive mobility protocol and time frames<sup>1,2</sup>  
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### Mobility Strategies for Adult Hospitalized Patients on Medical/Surgical and Critical Care Units

**Definitions, Operationalization, and Measurements from the Evidence**

| Passive/Active ROM<sup>1,2,4,17-19</sup> | ROM per progressive mobility protocol and time frames<sup>2,17</sup>  
| | Passive ROM: Nurse-assisted activity on a scheduled basis<sup>1,2,17</sup> (requires an average of 8 minutes)<sup>1</sup>  
| | Active assisted ROM (manual assistance) in supine position<sup>17</sup>  
| | Active ROM: Patient-driven activity on a scheduled basis<sup>1,2</sup>  
| | Independent ROM in supine position<sup>17</sup>  
| | ROM X3 daily<sup>2</sup>  
| | Unresponsive patients: Passive ROM every morning for all limbs, 10 repetitions in all cardinal directions<sup>17</sup>  
| | Passive ROM: X3 daily by RN or assistive personnel (level I)<sup>2</sup>  
| | Passive ROM: X3 daily by RN or assistive personnel (level II)<sup>2</sup>  
| | Active ROM: X3 daily by patient (level II)<sup>2</sup>  
| Moves upright in bed<sup>1</sup> |  
| Sitting at edge of bed<sup>2,12,17,19</sup> | Sitting at edge of bed per progressive mobility protocol and time frames<sup>2,12,17</sup>  
| | Bed sitting with RN, PT, RT assistance for 15 minutes<sup>2</sup>  
| | Progressive bed sitting for a minimum of 20 minutes X3 daily<sup>2</sup>  
| Chair mode in bed<sup>2,18</sup> | Chair mode per progressive mobility protocol and time frames<sup>2</sup>  
| | Full chair mode for 20 minutes X3 daily<sup>2</sup>  
| Progressive Passive/Active structured resistance exercise<sup>1,2,4,13</sup> (including bed cycling<sup>1,4</sup>) | Strength excises per progressive mobility protocol and time frames<sup>2</sup>  
| | Passive cycling with fixed pedal rates for sedated patients<sup>4</sup>  
| | Active cycling at six levels of resistance per individually adjusted intensity levels<sup>1,4</sup>  
| | Once daily active resistance exercises<sup>2,4</sup>  
| | Isometric quadriceps forces via handheld dynamometer<sup>4</sup>  
| | Semi-recumbent bed cycling position for 20 minutes (starting on day 5)<sup>4</sup>  
| | Passive cycling = 20 cycles/min<sup>4</sup>  
| | Active cycling<sup>1,4</sup> = 2 sessions of 10 minutes<sup>4</sup>  
| Out of bed in cardiac chair/chair<sup>1,3,12,17</sup> | Up to chair per progressive mobility protocol and time frames<sup>1,3,12,17</sup>  
| | Full assist to cardiac chair X2 daily<sup>7</sup>  
| | Pivots to chair 2 to 3 times per day<sup>2</sup>  
| | Active transfer to chair<sup>17</sup> RN, PT, RT assistance X3 daily<sup>2</sup>  
| | Number of times standing<sup>2,3</sup> with RN, PT, RT assistance<sup>2</sup>  
| | Number of times up to chair for meals<sup>2</sup>  

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<td><strong>Ambulation</strong>&lt;sup&gt;1,2,4,12,13,16,19&lt;/sup&gt;</td>
<td><strong>Ambulation (Walking):</strong> The ability to walk from place to place (ranges from dependent to completely independent) <em>(Nursing Outcomes Classification [NOC])&lt;sup&gt;6&lt;/sup&gt;</em></td>
</tr>
</tbody>
</table>
|  |  • Ambulate per progressive mobility protocol and time frames<sup>2</sup>  
  • Independently ambulate<sup>4</sup>  
  • Number of times ambulated with progressively longer distances with less assistance X2 to X3 daily with RN, PT, RT, UAP<sup>2</sup>  
  • Autonomy during ambulation via Functional Ambulation Categories scale (0 to 5 scale)<sup>4</sup>  
  • Ambulation distance with and without assistance<sup>12</sup>  
  • Walking distance on last day in critical care unit<sup>12</sup>  
  • 6 minute walking distance at hospital discharge<sup>4</sup> |
| **Medical Stability**<sup>16</sup> |  • Sufficient perfusion to maintain normal organ function within acceptable parameters<sup>16</sup> |
|  |  • Example of acceptable parameters<sup>16,17</sup>  
  o HR < 110/min at rest<sup>16</sup>  
  o MAP between 60 and 110 mm Hg<sup>16</sup>  
  o FiO2 < 0.6<sup>16</sup>  
  o Supplemental oxygen titrated to maintain oxygen saturation greater than 88% with activity<sup>16</sup>  
  **(See Page 3, Mobility Criteria under Measurements section for further parameters)** |
| **Independent Functional Status**<sup>4,13,17</sup> |  • Ability to perform activities of daily living and walk independently<sup>17</sup> |
|  |  • Independently perform ADLs and ambulate independently (at hospital discharge)<sup>17</sup>  
  • Independently stand and ambulate<sup>4</sup>  
  • Six ADLs<sup>17</sup> + walk independently<sup>4,17</sup>  
  • Rise from chair with armrests and stand, using Berg Balance Scale item of “sit and stand” (0 to 4 scale)<sup>4</sup>  
  • Autonomy during ambulation via Functional Ambulation Categories scale (0 to 5 scale)<sup>4</sup>  
  • 6 minute<sup>4</sup> walking distance at hospital discharge<sup>4,17</sup>  
  • Functional Independence Measure<sup>17</sup> |
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<td>Medical/Surgical Patient Population: Definitions, Operationalization, and Measurement</td>
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<td>(Tolerance, physiologic stability, resistance to gravity, weight bearing, strength, distance, ADLs, etc.)</td>
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<td>Early mobility&lt;sup&gt;15&lt;/sup&gt;</td>
<td>Movement out of bed with change from horizontal to upright position for at least 20 minutes during first 24 hours of hospitalization, with progressive mobilization on each subsequent day during hospitalization&lt;sup&gt;15&lt;/sup&gt;</td>
<td>Progressive mobilization begun within 24 hours of admissions and continued on each subsequent day&lt;sup&gt;15&lt;/sup&gt;</td>
<td>Done at least 20 minutes during first 24 hours of hospitalization&lt;sup&gt;15&lt;/sup&gt;</td>
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<td>“Very early” rehabilitation&lt;sup&gt;3&lt;/sup&gt; (stroke unit)</td>
<td>Mobility interventions implemented within 2 days of stroke event&lt;sup&gt;3&lt;/sup&gt;</td>
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<tr>
<td>“Early” rehabilitation&lt;sup&gt;3&lt;/sup&gt; (stroke unit)</td>
<td>Mobility interventions implemented within 3 to 7 days of stroke event&lt;sup&gt;3&lt;/sup&gt;</td>
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<td>Resistance Exercise</td>
<td>Resistance exercises of upper limb, lower limb, and trunk per exercise program protocol and time frames, individually tailored for each patient's exercise tolerance&lt;sup&gt;10&lt;/sup&gt;</td>
<td>Four levels of exercise; each session 20 to 30 minutes X2 daily X5 weekly: &lt;sup&gt;10&lt;/sup&gt;</td>
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<td>▪ Resistance increased after 10 repetitions&lt;sup&gt;10&lt;/sup&gt;</td>
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<tr>
<td>Positioning or repositioning in bed&lt;sup&gt;1&lt;/sup&gt;</td>
<td>Self-turning on a regular basis&lt;sup&gt;1&lt;/sup&gt;</td>
<td>Nurse-assisted: Conducted every 2 hours&lt;sup&gt;1&lt;/sup&gt;</td>
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<td>Nurse-assisted turning on a scheduled basis (requires an average of 11 minutes)&lt;sup&gt;1&lt;/sup&gt;</td>
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<td>Active Range of Motion&lt;sup&gt;1&lt;/sup&gt;</td>
<td>Patient-driven activity on a scheduled basis&lt;sup&gt;1&lt;/sup&gt;</td>
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<td>Dangles at edge of bed&lt;sup&gt;1&lt;/sup&gt;</td>
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<tr>
<td>Functional Status&lt;sup&gt;10,13,15&lt;/sup&gt;</td>
<td>• Ability to perform activities of daily living (ADLs) (eating, dressing, bathing, ambulating, toileting) and instrumental ADLs (IADLs) (grocery shopping, meal preparation, housework, laundry, getting to places beyond walking distance, managing medications, managing finances, and using a telephone)&lt;sup&gt;13&lt;/sup&gt;</td>
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<td>• Assessment of patient’s independence in performing ADLs&lt;sup&gt;10,13&lt;/sup&gt;</td>
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<td>• Barthel Index for patient independence: measure 10 activities in daily living (index scale 0 to 100)&lt;sup&gt;10&lt;/sup&gt;</td>
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<td>o Feeding, transfers, personal hygiene, toilet transfers, bathing, walking, stairs, dressing, bladder/bowel continence&lt;sup&gt;10&lt;/sup&gt;</td>
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<td></td>
<td>• Timed Get Up and Go&lt;sup&gt;10,13&lt;/sup&gt;</td>
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<td></td>
<td>• Functional Ambulation Classification (scale 1 to 6)&lt;sup&gt;10&lt;/sup&gt;</td>
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<td>o Ability to ambulate a 10 foot distance&lt;sup&gt;10&lt;/sup&gt;</td>
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<td>o 1 = unable/assistance from more than 1 person&lt;sup&gt;10&lt;/sup&gt;</td>
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<td>o 6 = Independent on uneven surfaces, stairs, inclines&lt;sup&gt;10&lt;/sup&gt;</td>
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<th>Operationalization (Degree of Activity, Time and/or Frequency, etc. that can be easily replicated)</th>
<th>Measurement (Tolerance, physiologic stability, resistance to gravity, weight bearing, strength, distance, ADLs, etc.)</th>
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</table>
| Functional Status\(^{10;13;15}\) | • Ability to perform activities of daily living (ADLs) (eating, dressing, bathing, ambulating, toileting) and instrumental ADLs (IADLs) (grocery shopping, meal preparation, housework, laundry, getting to places beyond walking distance, managing medications, managing finances, and using a telephone)\(^{13}\) | • Assessment of patient’s independence in performing ADLs\(^{10;13}\) | • Barthel Index for patient independence: measure 10 activities in daily living (index scale 0 to 100)\(^{10}\)  
  ○ Feeding, transfers, personal hygiene, toilet transfers, bathing, walking, stairs, dressing, bladder/bowel continence\(^{10}\)  
  ○ Timed Get Up and Go:\(^{10;13}\) Mobility, balance, gait, transfer ability, walking\(^{13}\)  
  ○ Functional Ambulation Classification (scale 1 to 6)\(^{10}\)  
  ○ Ability to ambulate a 10 foot distance\(^{10}\)  
  ○ 1 = unable/assistance from more than 1 person\(^{10}\)  
  ○ 6 = Independent on uneven surfaces, stairs, inclines\(^{10}\)  
  • 2 Minute Walk Test: Exercise tolerance and exercise capacity\(^{13}\)  
  • Functional Independence Measure (FIM): Functional status in 7 areas which include self-care, locomotion, communication, social cognition, cooperation, problem-solving, sphincter control\(^{13}\)  
  • Hospital Admission Risk Profile (HARP): ADLs, Independent ADLs, cognitive status\(^{13}\)  
  • Lawton Instrumental ADL Scale: Independent ADLs activities including medication management, housekeeping, food preparation, transportation, shopping, managing finances, laundry\(^{13}\)  
  • SPICES: Asleep, problems with eating or feeding, incontinence, confusion, evidence of falls, skin breakdown\(^{13}\) |
### Other Definitions, Operationalization, and Measurement

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<tr>
<td>Functional Ambulation(^{14,20})</td>
<td>The ability of a person to walk, with or without the aid of appropriate assistive devices (such as prostheses, orthoses, canes, or walkers) safely and sufficiently to carry out mobility-related activities of daily living(^{14}) The ability of a person to walk with maximal independence and in the least amount of time under various environmental circumstances(^{20})</td>
<td>(Degree of Activity, Time and/or Frequency, etc. that can be easily replicated)(^{1})</td>
<td>(Tolerance, physiologic stability, resistance to gravity, weight bearing, strength, distance, ADLs, etc.)(^{1})</td>
</tr>
<tr>
<td>Capacity(^{14})</td>
<td>Highest level of functioning that a person may reach in a given domain and is generally done in “standardized environment” (International Classification of Functioning)(^{14})</td>
<td>Monitoring the quantity and quality of daily ambulation(^{14})</td>
<td></td>
</tr>
<tr>
<td>Ambulatory Capacity(^{14})</td>
<td>Highest level of walking function achieved within a standardized environment(^{14})</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performance(^{14})</td>
<td>What an individual does in his/her current environment (International Classification of Functioning)(^{14})</td>
<td>Monitoring the quantity and quality of daily ambulation(^{14})</td>
<td></td>
</tr>
<tr>
<td>Ambulatory Performance(^{14})</td>
<td>Ambulation an individual actually achieves in his or her environment; dependent upon ability to execute a given task + the constraints posed by the surrounding environment(^{14})</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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**Abbreviations**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>X1, X2, X3</td>
<td>Multiplied by the number, as in “times one”</td>
</tr>
<tr>
<td>ADLs</td>
<td>Activities of Daily Living</td>
</tr>
<tr>
<td>CLRT</td>
<td>Continuous lateral rotation therapy</td>
</tr>
<tr>
<td>FIM</td>
<td>Functional Independence Measure</td>
</tr>
<tr>
<td>FiO2</td>
<td>Fraction of inspired Oxygen</td>
</tr>
<tr>
<td>HARP</td>
<td>Hospital Admission Risk Profile</td>
</tr>
<tr>
<td>HR</td>
<td>Heart Rate</td>
</tr>
<tr>
<td>HOB</td>
<td>Head of Bed</td>
</tr>
<tr>
<td>IADLs</td>
<td>Independent Activities of Daily Living; also known as Instrumental Activities of Daily Living</td>
</tr>
<tr>
<td>ICU</td>
<td>Intensive Care Unit</td>
</tr>
<tr>
<td>M/S</td>
<td>Medical/Surgical</td>
</tr>
<tr>
<td>MAP</td>
<td>Mean Arterial Pressure</td>
</tr>
<tr>
<td>OT</td>
<td>Occupational Therapy</td>
</tr>
<tr>
<td>PaO2</td>
<td>Partial Pressure Arterial Oxygen</td>
</tr>
<tr>
<td>PEEP</td>
<td>Positive End Expiratory Pressure</td>
</tr>
<tr>
<td>PT</td>
<td>Physical Therapy</td>
</tr>
<tr>
<td>RASS</td>
<td>Richmond Agitation Sedation Score</td>
</tr>
<tr>
<td>RN</td>
<td>Registered Nurse</td>
</tr>
<tr>
<td>ROM</td>
<td>Range of Motion</td>
</tr>
<tr>
<td>RT</td>
<td>Respiratory Therapist</td>
</tr>
<tr>
<td>SPICES</td>
<td>Asleep, Problems with eating/feeding, Incontinence, Confusion, Evidence of falls, Skin Breakdown</td>
</tr>
<tr>
<td>UAP</td>
<td>Unlicensed Assistive Personnel</td>
</tr>
</tbody>
</table>
Mobility Strategies for Adult Hospitalized Patients on Medical/Surgical and Critical Care Units

Definitions, Operationalization, and Measurements from the Evidence

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Definitions, Operationalization, and Measurements from the Evidence

Reference List


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