## Occupational Therapy's Role in Reducing Length of Stay in Inpatient Care

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Presented in Partial Fulfillment of the Master of Science in Occupational Therapy degree at Thomas Jefferson University

### Objectives of Presentation:
- Identify occupational performance deficits that adults typically experience at inpatient settings.
- Analyze financial benefit of decreased length of stay for adults across inpatient settings.
- Describe occupation based interventions that decrease length of stay for the adult inpatient population.

### PICO: How does engagement in ADL's and/or IADL’s impact length of stay (LOS) in inpatient settings?

### Methods:
- Databases used: PubMed, SCOPUS, and CINAHL
- Search terms:
  - **P:** Inpatient, acute, rehabilitation, acute rehabilitation, subacute, subacute rehabilitation, skilled nursing facility, hospital, long term acute care hospital, intensive care unit
  - **I:** Activities of daily living, ADL, Instrumental activities of daily living, IADL, occupational therapy, mobility, functional mobility, self care, self-care
  - **O:** Reduce length of stay, length of stay, reduce cost
- Quantitative synthesis of 12 articles using Critical Review Form-Quantitative Studies

### Results and Primary Outcomes:
- Four types of interventions: occupation based, early rehabilitation, early mobilization, and pre-operative assessment
- LOS: statistically significant reductions in LOS in intensive care unit (ICU)\(^{4,9,22}\), acute care\(^{16}\), and acute rehabilitation\(^{9}\).
  - Clinically significant reduction in LOS in ICU\(^{14,20}\).
- Impact on cost:
  - Occupation based interventions assoc. w/ improved Functional Independence Measure (FIM) scores, ↓ need for services\(^{7,21}\)
  - Early rehab saved $7,000 per patient in ICU ($12 million annually)\(^{9}\), ICU cost analysis of intervention showed annual savings of $817,836\(^{16}\)
  - Early mobilization in ICU saves $1.5 million annually\(^{4}\)

### Three themes identified:

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<thead>
<tr>
<th>Theme</th>
<th>Key points/findings</th>
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| Strength of Evidence         | Moderate strength of evidence  
|                              | No randomized control trials, but overall consistent outcomes  
|                              | Primarily retrospective analysis (9/12)                                             |
| Early Interprofessional      | Utilization of OT, PT, and Nursing to promote functional activity\(^{4,9,20,21,22}\) |
| Interventions               | ICU → floor status\(^{4,9,14,20,22}\)                                               |
|                              | Interprofessional training programs\(^{8,5,7,8,9,14,20,21,22}\)                    |
|                              | Physical gains over functional gains (initial step to improve functional outcomes) |
|                              | Assists in discharge recommendation\(^{5,8,19,20}\)                                |
| Secondary outcomes          | Functional ability as measured by Modified Barthel Index (MBI) scores\(^{19}\)     |
|                              | Increase in OT referrals\(^{16}\)                                                   |
|                              | Reduced time on ventilator\(^{4}\)                                                  |
|                              | Patients more likely to be discharged home without services\(^{4,19}\)             |
|                              | Higher activity levels\(^{20}\)                                                     |
|                              | Reduced risk for hospital-acquired pneumonia\(^{20}\)                               |
|                              | Reduced risk of falls\(^{9}\)                                                       |
References


