# Summary Chart: Occupational Therapy Practice Guidelines for Adults with Stroke

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This chart depicts evidence strengths and gaps, by various practice area, for occupational therapy practice with adults who have had a stroke. The purpose of this chart is to stimulate research ideas to address research gaps (depicted by negative sign) and build upon existing research. A list of references, by topic area, follows the chart.

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<th>PRACTICE AREA</th>
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| **PREVENTION OF POSTURAL DEFORMITIES** (25)       | *PROM/Stretching*  
Buschbacher, 1996; Langhorne & Pollock, 2002; Scottish Intercollegiate Guidelines Network, 2002 | +/-                  |
| **PREVENTION OF PAIN AND OTHER COMPLICATIONS**    | *Scapulohumeral Rhythm*  
Bagg & Forrest, 1988; Bourne, Choo, Regan, MacIntyre, & Oxland, 2007; Freedman & Munro, 1966; Stokdijk, Eilers, Nagels, & Rozing, 2003; Inman, Saunders, & Abbott, 1944; Kumar, Metter, Mehta, & Chew, 1990; Gillen & Burkhardt, 2004; *Subluxation*  
Gillen & Burkhardt, 2004; Dirette & Hinojosa, 1994; Faghri et al., 1994; Geurts, Visschers, van Limbeck, & Ribbers, 2000; *Pressure Ulcers*  
Mudie, Winzeler-Mercay, Radwan, & Lee, 2002 | + Insufficient evidence for use of external supports and e-stim |
| **PREVENTION OF LEARNED NONUSE** (27)             | *Demonstration of*  
Kunkel et al., 1999; Mark & Taub, 2004; | +                   |
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Subluxation


**Hand Edema**


**Pressure Ulcers**


**Summary of Evidence:** The studies revolving around prevention of pain and other complications associated with immobility or abnormal joint alignment include 21 articles. The articles are separated into four categories. The categories and corresponding strengths of evidence are as follows: scapulohumeral rhythm (strong), subluxation (moderate), hand edema (moderate), and pressure ulcers (weak).

**Gap in Evidence:** Limits in research regarding prevention of pain and other complications associated with immobility or abnormal joint alignment are evident, especially involving pressure ulcers, due to limited number of included articles.
PREVENTION OF LEARNED NONUSE

Demonstration of


Weightbearing


Summary of Evidence: The studies revolving around prevention of learned nonuse include three articles. The articles are separated into two categories. The categories and corresponding strengths of evidence are as follows: demonstration of learned nonuse (moderate) and weightbearing (weak).

Gap in Evidence: Limits in research regarding prevention of learned nonuse are evident, especially in the weightbearing category, due to limited number of included articles.

PREVENTION OF INJURY DUE TO FALLS (28)

Extrinsic Risk Factors


Summary of Evidence: There is one study revolving around prevention of injury due to falls. The body of evidence focused on prevention of injury due to falls is rated weak.

Gap in Evidence: Limits in research regarding prevention of injury due to falls are evident due to limited number of included articles within the category.
PREVENTION OF ASPIRATION

OT’s Role


Summary of Evidence: The studies revolving around prevention of aspiration include two articles. The evidence within this category received a moderate strength rating.

Gap in Evidence: Limits in research regarding prevention of aspiration are evident due to limited number of included articles and method of research.

PREVENTION OF DEPRESSION

OT’s Role


Summary of Evidence: The studies revolving around prevention of depression include two articles. The evidence within this category received a moderate strength rating.

Gap in Evidence: Limits in research regarding prevention of aspiration are evident due to limited number of included articles.

RESTORATION OF MOTOR SKILLS

Background of Plasticity


Summary of Evidence: The studies revolving around restoration of motor skills include three articles. The evidence within this category received a moderate strength rating.

Gap in Evidence: Limits in research regarding restoration of motor skills are evident due to limited number of included articles.

RESTORATION OF COGNITIVE SKILLS

OT’s Role


Transfer of Learning


Practice


Summary of Evidence: The studies revolving around restoration of cognitive skills include four articles. The articles are separated into three categories. The categories and corresponding strengths of evidence are as follows: occupational therapy's role (weak), transfer of learning (weak), and practice (weak).

Gap in Evidence: Limits in research regarding restoration of cognitive skills are evident due to limited number of included articles.

RESTORATION OF EMOTIONAL COPING SKILLS (31)

Practice/Homework


Summary of Evidence: There is one article regarding the restoration of emotional coping skills. The three articles include. The evidence is given a weak strength rating.
Gap in Evidence: Limits in research regarding restoration of emotional coping skills are evident due to limited number of included articles.

**ACTIVITY DEMAND MODIFICATION**

*Continuing Adjustment*


Summary of Evidence: The studies revolving around activity demand modification include two articles. The evidence is given a moderate strength rating.

Gap in Evidence: Limits in research regarding activity demand modification are evident due to limited number of included articles.

**ENVIRONMENT MODIFICATION**


Summary of Evidence: There is one study regarding environment modification. The evidence is given a weak strength rating.

Gap in Evidence: Limits in research regarding environment modification are evident due to limited number of included articles.

**ADAPTIVE EQUIPMENT (35)**


Summary of Evidence: There is one study regarding adaptive equipment. The evidence is given a weak strength rating.

Gap in Evidence: Limits in research regarding adaptive equipment research evident due to the limited number of included articles.
INTERVENTION TO PROMOTE HEALTHY LIFESTYLES (35)


Summary of Evidence: The studies regarding promotion of healthy lifestyles include two articles. The evidence is given a weak strength rating.

Gap in Evidence: Limits in research regarding promotion of healthy lifestyles are evident due to limited number of included articles.

INTERVENTIONS TO IMPROVE CLIENT FACTORS RELATED TO MOVEMENT


Summary of Evidence: There is one study regarding improving client factors related to movement. The evidence is given a weak strength rating.

Gap in Evidence: Limits in research regarding improving client factors related to movement are evident due to limited number of included articles.

INTERVENTIONS TO MANAGE SECONDARY IMPAIRMENTS (48)

*Hand Edema and HEP*


*Occupation Embedded Ex*


*Subluxation*


*Resting Hand Splints*


Summary of Evidence: The studies revolving around managing secondary impairments include seven systematic reviews. The reviews are divided into four categories, The categories and corresponding strengths of evidence are as follows: hand edema and HEP (moderate), occupation embedded exercises (moderate), subluxation (strong), and resting hand splints (strong).

Gap in Evidence: Limits in research within the hand edema and occupation embedded exercise categories are evident due to limited number of included articles within the systematic reviews.

**CONSTRAINT-INDUCED MOVEMENT THERAPY (52)**


Summary of Evidence: The studies revolving around constraint-induced movement therapy include 15 articles. The evidence is given a strong strength rating.

**ROBOT-ASSISTED THERAPY**


Summary of Evidence: The studies revolving around robot-assisted therapy include three articles. The evidence is given a strong strength rating.

**INTERVENTIONS TO IMPROVE APRAXIA**

*Compensatory Strategy*


*Task Based*


Summary of Evidence: The studies revolving around improving apraxia include six articles. The articles are divided into two categories. The categories and corresponding strengths of evidence are as follows: compensatory strategy (strong) and task based (weak).

Gap in Evidence: Limits in research regarding improving apraxia are evident due to limited number of included articles.

**INTERVENTIONS TO IMPROVE SPATIAL NEGLECT (57)**


Summary of Evidence: The studies revolving around improving spatial neglect include four articles. The evidence is given a moderate strength rating.

Gap in Evidence: Limits in research regarding improving spatial neglect are evident due to limited number of included articles.

**TRANSFER OF TRAINING**


Summary of Evidence: There is one systematic review regarding transfer of training. The evidence is given a moderate strength rating.

Gap in Evidence: Limits in research regarding transfer of training are evident due to limited number of included articles.
IMPROVEMENT IN ACTIVITY AND ROLE PERFORMANCE


ADLs/leisure in facility


*PT Education*


*Community*


**Summary of Evidence:** The studies regarding improving activity and role performance include 20 articles. The articles are separated into three categories. The categories and corresponding strengths of evidence are as follows: ADLs/leisure in facility (strong), patient education (weak), and community (weak).

**Gap in Evidence:** Limits in research regarding improving activity and role performance are evident due to limited number of included articles methods of research.