

Burn Rehabilitation Therapist Competency Tool – Version 2

This document is intended to establish a framework for basic practice standards related to burn rehabilitation and provide a common language for education programs to train burn rehabilitation therapists (occupational and physical therapists).

All areas of competency should include relevant knowledge and skill application with consideration for patient age, gender, socioeconomic status, and cultural background. The full spectrum of competence should incorporate problem solving, clinical judgment, safe and effective technique, interpersonal communication with the patient and their caregivers, and accurate thorough documentation.

All statements refer to skills performed by an occupational or physical therapist and therefore a rehabilitation specific context is implied for all competency statements. The competency items are to be implemented at the appropriate phase(s) of care which includes acute, intermediate and long-term rehabilitation with burn patients who are hospitalized for acute care, rehabilitation and/or receiving rehabilitation as an outpatient.

Application of the tool should be in compliance with discipline-specific professional practice acts and burn center specific job descriptions.

BRTCT-2

For the patient with burn injury, the rehabilitation therapist will:

LEVEL I

Competency 1.1 – Burn Rehabilitation Evaluation, Treatment and Discharge Planning

- 1.1.1 *Knowledge:* Describe the relationship between depth, extent, and location of burn on potential functional and aesthetic outcome.
- 1.1.2 *Knowledge:* Verbalize an understanding of the components of a comprehensive rehabilitation evaluation and outcome objectives.
- 1.1.3 *Knowledge:* Describe common complications associated with burn injury and the appropriate rehabilitative management.
- 1.1.4 *Knowledge:* Describe discharge and post-discharge therapy related needs.
- 1.1.5 *Knowledge:* Describe relevant functional and/or quality of life outcome measures.
- 1.1.6 *Application:* Perform a comprehensive rehabilitation evaluation, including problem identification, treatment goals, and plan of care.
- 1.1.7 *Application:* Perform ongoing reevaluation and progress rehabilitation treatment plan with modifications as needed.
- 1.1.8 *Application:* Develop a patient-specific post-discharge home program.
- 1.1.9 *Application:* Provide referral for, or provision of, post-discharge therapy follow-up.
- 1.1.10 *Application:* Demonstrate use of relevant functional and/or quality of life outcome measures.
- 1.1.11 *Application:* Analyze assessment findings and discontinue therapeutic interventions when no longer providing benefit.

1.1.12 *Application:* Demonstrate educational instruction to patient/caregiver for all relevant components of burn rehabilitation.

1.1.13 *Application:* Demonstrate clear and timely communication with burn team members regarding therapy plan of care.

Competency 1.2 – Wound Care and Assessment

1.2.1 *Knowledge:* Describe methods of burn wound assessment including size, extent, depth, and location of injury.

1.2.2 *Knowledge:* Describe the principles of basic burn wound care and dressing to facilitate healing and control infection.

1.2.3 *Application:* Demonstrate basic burn wound care and dressing, including proper techniques for infection control.

Competency 1.3 – Critical management

1.3.1 *Knowledge:* Describe the physiological response of the burn patient to increased activity.

1.3.2 *Application:* Demonstrate proper monitoring and response to physiological changes during therapy.

1.3.3 *Application:* Demonstrate incorporation of critical care equipment during therapy.

Competency 1.4 - Edema

1.4.1 *Knowledge:* Describe the indications, contraindications, precautions, principles and rationale for therapy techniques to manage edema.

1.4.2 *Application:* Demonstrate implementation of therapy techniques for management of edema.

Competency 1.5 – Pain/Anxiety Management

1.5.1 *Knowledge:* Differentiate between pain, anxiety, and other pain-related behaviors and symptoms during therapy with the sedated and alert patient, and understand the options for management.

1.5.2 *Knowledge:* Describe positive and negative coping behaviors and their potential impact on adherence with therapy and overall outcome.

1.5.3 *Application:* Evaluate and/or identify pain, anxiety, and other pain-related behaviors and symptoms during therapy with the sedated and alert patient.

1.5.4 *Application:* Demonstrate pain and/or anxiety management in preparation for and during therapy.

1.5.5 *Application:* Incorporate strategies for patient adherence and coping into the development of a rehabilitative treatment and discharge plan.

Competency 1.6 – Positioning

- 1.6.1 *Knowledge:* Describe the indications, contraindications, precautions, principles and rationale for patient positioning.
- 1.6.2 *Application:* Demonstrate patient positioning to minimize or correct contractures, and protect vulnerable structures.
- 1.6.3 *Application:* Demonstrate selection and use of equipment for patient positioning.

Competency 1.7 – Splinting

- 1.7.1 *Knowledge:* Describe the indications, contraindications, precautions, principles and rationale for the use of basic static splints.
- 1.7.2 *Application:* Demonstrate fabrication, revision, and application of basic static splints to minimize or correct contractures and protect vulnerable structures.
- 1.7.3 *Application:* Demonstrate ongoing assessment of fit and wearing schedule of basic static splints and facilitate modifications as needed.

Competency 1.8 – Range of Motion

- 1.8.1 *Knowledge:* Describe the indications, contraindications, precautions, principles and rationale for active, active-assisted, and passive range of motion.
- 1.8.2 *Application:* Demonstrate active, active-assisted, and passive range of motion techniques.
- 1.8.3 *Application:* Demonstrate objective measurement of range of motion.

Competency 1.9 – Post-operative Management

- 1.9.1 *Knowledge:* Describe various types of skin grafts, flaps, and skin substitutes and rationale for their use.
- 1.9.2 *Knowledge:* Describe the indications, contraindications, precautions, principles and rationale for post-operative rehabilitation.
- 1.9.3 *Knowledge:* Describe common reconstructive surgeries and rationale for their use.
- 1.9.4 *Application:* Demonstrate post-operative management of skin grafts, flaps, skin substitutes, and donor sites.
- 1.9.5 *Application:* Demonstrate post-operative positioning, splinting, range of motion, and out of bed mobilization.

Competency 1.10 –Functional Mobility and Gait

- 1.10.1 *Knowledge:* Describe the indications, contraindications, precautions, principles and rationale for functional mobility training.
- 1.10.2 *Knowledge:* Describe the indications, contraindications, precautions, principles and rationale for gait training.
- 1.10.3 *Application:* Demonstrate bed mobility and transfer training.
- 1.10.4 *Application:* Demonstrate gait training, including lower extremity vascular support.

- 1.10.5 *Application:* Demonstrate selection and use of assistive devices for progression of upright mobility and ambulation.

Competency 1.11 – Activities of Daily Living

- 1.11.1 *Knowledge:* Describe the indications, contraindications, precautions, principles and rationale for training of activities of daily living and instrumental activities of daily living.
- 1.11.2 *Application:* Demonstrate training of activities of daily living.
- 1.11.3 *Application:* Demonstrate training of instrumental activities of daily living.
- 1.11.4 *Application:* Demonstrate selection and use of adaptive equipment for progression of independence with activities of daily living.

Competency 1.12 – Physical Agents/ Modalities

- 1.12.1 *Knowledge:* Describe the indications, contraindications, precautions, principles and rationale for the use of physical agents/modalities in burn rehabilitation.
- 1.12.2 *Application:* Demonstrate selection and use of physical agent/modality for designated therapeutic goals.

Competency 1.13 – Scar Assessment and Management

- 1.13.1 *Knowledge:* Describe the indications, contraindications, precautions, principles, rationale, and expected outcome for pressure therapy, scar massage, inserts, and gel sheeting.
- 1.13.2 *Knowledge:* Describe the methods and tools available for burn scar assessment.
- 1.13.3 *Application:* Demonstrate application, fitting, and progression of wear of pressure therapy devices.
- 1.13.4 *Application:* Demonstrate scar massage.
- 1.13.5 *Application:* Demonstrate application and use of inserts and gel sheeting.

Competency 1.14 – Management of Cutaneous Impairment

- 1.14.1 *Knowledge:* Describe common impairments in cutaneous function as a result of burn injury.
- 1.14.2 *Knowledge:* Describe assessment and intervention options for cutaneous impairment.
- 1.14.3 *Application:* Demonstrate evaluation, prevention and/or management of pressure sores.
- 1.14.4 *Application:* Demonstrate evaluation and management of burn pruritus
- 1.14.5 *Application:* Demonstrate evaluation and management of impaired sensory function.
- 1.14.6 *Application:* Demonstrate evaluation and management of impaired thermoregulation.
- 1.14.7 *Application:* Demonstrate evaluation and management of skin and scar vulnerability.

Competency 1.15 – Endurance & Muscular Strength

- 1.15.1 *Knowledge:* Describe the indications, contraindications, precautions, principles and rationale for cardiopulmonary (endurance) and progressive resistance exercise training.
- 1.15.2 *Application:* Demonstrate cardiopulmonary (endurance) and progressive resistance exercise training.

Competency 1.16 – Community Reintegration and Health/Wellness

- 1.16.1 *Knowledge:* Describe long-term needs related to community reintegration and health/wellness.
- 1.16.2 *Application:* Provide referral or provision of training for work/school re-entry and leisure pursuits.
- 1.16.3 *Application:* Provide referral or provision of training for social skills and image enhancement.
- 1.16.4 *Application:* Provide referral for social and/or psychological support.

LEVEL II

Competency 2.2 – Wound Care and Assessment

- 2.2.1 *Knowledge:* Describe principles of complex burn wound care, debridement, and dressing.
- 2.2.2 *Knowledge:* Differentiate between acute, chronic, and complex wound healing and understand the treatment options.
- 2.2.3 *Application:* Demonstrate complex wound care and dressing, including techniques for debridement.

Competency 2.7 – Splinting

- 2.7.1 *Knowledge:* Describe the indications, contraindications, precautions, principles and rationale for the use of complex static, dynamic, and static progressive splints.
- 2.7.2 *Application:* Demonstrate fabrication, revision, and application of complex static, dynamic, and static progressive splints to minimize or correct contractures, and protect vulnerable structures.
- 2.7.3 *Application:* Demonstrate ongoing assessment of fit and wearing schedule of complex static, dynamic, and static progressive splints and facilitate modifications as needed.

Competency 2.13 – Scar Assessment and Management

- 2.13.1 *Knowledge:* Describe the properties and methods of application of burn scar assessment tools.
- 2.13.2 *Knowledge:* Describe the adjustments and modifications necessary to optimize the efficacy of pressure therapy devices.
- 2.13.3 *Application:* Demonstrate objective measurement of scars.
- 2.13.4 *Application:* Demonstrate and/or facilitate measuring and ordering of custom pressure devices.

- 2.13.5 *Application:* Demonstrate ongoing assessment of pressure device fit and facilitate modifications as needed.
- 2.13.6 *Application:* Demonstrate and/or facilitate fabrication, modification, and application of a transparent face mask.

Competency 2.17 - Serial Casting

- 2.17.1 *Knowledge:* Describe the indications, contraindications, precautions, principles and rationale for the use of serial casting to minimize or correct burn scar contracture.
- 2.17.2 *Application:* Demonstrate application, monitoring, and removal of serial casts.

Competency 2.18 – Biomechanics

- 2.18.1 *Knowledge:* Describe skin, scar, soft tissue, and joint biomechanics and how they apply to burn rehabilitation techniques.
- 2.18.2 *Application:* Incorporate understanding of skin, scar, soft tissue, and joint biomechanics in the implementation of rehabilitation techniques.

Competency 2.19 – Complex Burn Sequelae

- 2.19.1 *Knowledge:* Describe the indications, contraindications, precautions, principles and rationale for implementing burn rehabilitation when complex burn sequelae are present.
- 2.19.2 *Application:* Demonstrate rehabilitation related evaluation and treatment for limb loss.
- 2.19.3. *Application:* Demonstrate rehabilitation related evaluation and treatment for neuromuscular impairment.
- 2.19.4 *Application:* Demonstrate rehabilitation related evaluation and treatment for tendon, joint and bone complications, including tendon/joint exposure and heterotopic ossification.

For background information on the development and expansion of the Burn Rehabilitation Therapist Competency Tool, access the full manuscripts on Journal of Burn Care and Research:

Original BRTCT:

http://journals.lww.com/burncareresearch/Abstract/2011/07000/Clinical_Compencies_for_Burn_Rehabilitation.2.aspx

Revised (Current) BRTCT:

http://journals.lww.com/burncareresearch/Abstract/2017/01000/Burn_Rehabilitation_Therapists_Compency.39.aspx

The BRTCT was used as the foundation for the development of the [Burn Therapist Certification](#)