

**Subject:** Strapping  
**Guideline #:** CG-MED-54  
**Status:** Reviewed

**Publish Date:** 01/03/2024  
**Last Review Date:** 11/09/2023

## Description

This document addresses the use of strapping, strategically applying overlapping layers of adhesive plaster or tape to a specific area of the body for the purpose of applying pressure and holding that body part in place. Strapping is intended to partially immobilize or restrict movement in order to provide support to the identified body part.

Note: This document does not address elastic therapeutic tape (such as Kinesio<sup>TM</sup> taping).

## Clinical Indications

### Medically Necessary:

Strapping is considered **medically necessary** for the treatment of injuries, illness or post-operative care **in any** of the following indications:

- Hand; **or**
- Finger; **or**
- Ankle; **or**
- Foot; **or**
- Toe.

### Not Medically Necessary:

Strapping is considered **not medically necessary** for all other indications.

## Coding

*The following codes for treatments and procedures applicable to this guideline are included below for informational purposes. Inclusion or exclusion of a procedure, diagnosis or device code(s) does not constitute or imply member coverage or provider reimbursement policy. Please refer to the member's contract benefits in effect at the time of service to determine coverage or non-coverage of these services as it applies to an individual member.*

### When services may be Medically Necessary when criteria are met:

#### CPT

29280	Strapping; hand or finger
29540	Strapping; ankle and/or foot
29550	Strapping; toes

#### ICD-10 Diagnosis

All diagnoses

### When services are Not Medically Necessary:

For the procedure codes listed above when criteria are not met, and for the following procedures for all indications

#### CPT

29200	Strapping; thorax
29240	Strapping; shoulder (eg, Velpeau)
29260	Strapping; elbow or wrist
29520	Strapping; hip
29530	Strapping; knee
29799	Unlisted procedure, casting or strapping

#### ICD-10 Diagnosis

All diagnoses

## Discussion/General Information

Strapping is an established method of partially immobilizing or limiting movement in order to decrease pain or facilitate healing. The terms strapping and taping are frequently used interchangeably; however, the objective of each technique differs. Strapping, according to the National Library of Medicine, is "the application of adhesive plaster in overlapping strips upon or around a part (as a sprained ankle or the chest in pleurisy) to serve as a splint to reduce motion or to hold surgical dressings in place upon a surgical wound." While some taping is meant to provide support or aid in maintaining alignment without movement, other types of taping, such as kinesio taping, also called elastic therapeutic taping, are used purportedly to improve circulation without restricting movement, and are not synonymous with strapping. Other methods of taping, such as low-dye taping, used to correct the posture of the foot or apply plantar pressure, can be used to treat chronic inflammatory conditions such as plantar fasciitis.

### *Strapping of the hand, finger or toes*

Injuries of the fingers or the toes, such as certain fractures, sprains, strains or dislocations are common injuries in the United States (U.S.). Treatment frequently includes protected mobilization and efforts to reduce symptoms such as pain and swelling. Both immobilization and protected mobilization support soft tissue healing while protecting against further injury. In addition, as protected mobilization allows some movement, stiffness can be prevented and range of motion maintained. Strapping, also known as buddy,

neighbor, or functional taping, is one method of providing protected mobilization. The injured digit is taped to an adjacent digit which serves to provide partial immobilization and support while the affected digit is healing. Buddy taping is a standard intervention for the treatment of both non-displaced fractures and displaced fractures following reduction (Hatch, 2003; Jones, 2012; Nellans, 2013). Multiple studies support that the use of strapping for achieving results similar or better outcomes than splinting or other forms of immobilization (Braakman, 1998; Chalmer, 2013; Martínez-Catalán, 2020; Park, 2015; Paschos, 2014; Poolman, 2005; van Aaken, 2007). In addition to injuries, strapping is commonly used as an alternative or adjunctive postoperative treatment to surgery for deformities. For example, strapping may be used to facilitate realignment in minor nonsurgical cases of hammertoe or to maintain correct position during postoperative healing.

#### *Strapping of the foot or ankle*

Ankle sprains and strains are a very common injury. An estimated 628,000 foot and ankle sprains occur in individuals in the U.S. each year. The treatment of ankle injuries, such as sprains or strains, varies depending upon the type and severity of the injury. Rest, ice, compression and elevation (RICE) therapy is often recommended for the first 24 to 48 hours following injury. Additional treatment options range from complete immobilization with casting to no supportive devices. Functional treatment or partial immobilization with strapping allows for some movement to maintain range of motion while providing some support. The 2013 American Physical Therapy Association (APTA) Clinical Practice Guidelines on Ankle Ligament Sprains recommends individuals use some type of external support in the acute phase along with progressive weight-bearing. The type of support should be based upon the severity of the injury. The evidence cited supporting strapping verses complete immobilization is based upon one cohort study and one cadaver study.

There is some debate regarding the best treatment for ankle injuries, however strapping remains a standard of care as a functional treatment option. Functional treatment allows individuals to quickly regain function and restore flexibility and strength as compared to complete immobilization with casting (Ardèvol, 2002; Kannus, 1991; Seah, 2010; Sommer, 1989). Due to the ability of strapping to temporarily support and restrict movement, it may be used for other types of foot or ankle injuries such as plantar fasciitis or tendinitis, or post-operatively.

#### *Strapping of the thorax*

There is no evidence supporting the use of chest or thorax strapping for any conditions, including back or neck pain. Chest wall strapping results in breathing in lower lung volumes and mimics the effects of restrictive lung diseases. While chest strapping can limit pain associated with fractured ribs, the risk of adverse pulmonary outcomes and alternative treatments for pain recommend against chest immobilization (Lazcano, 1989; Quick, 1990).

#### *Strapping for other conditions*

There is little clinical evidence in the form of published medical literature or clinical practice guidelines which support the use of strapping the elbow, wrist, shoulder, hip or knee. In addition, there is no indication that strapping is a standard of care for any conditions in these areas. The American Heart Association/ American Stroke Association 2016 guidelines for adult stroke rehabilitation and recovery note "Currently, there is insufficient evidence to support or refute the efficacy of shoulder strapping (taping) for the prevention of hemiplegic shoulder pain."

## Definitions

Displaced fracture: When a bone has fractured (broken) and there is separation between the pieces.

Nondisplaced fracture: When a bone has fractured but has not separated.

Phalanges: Long bones located in the fingers or toes.

Sprain: Injury to the strong flexible fibers (ligaments) which surround a joint.

Strain: Injury to a muscle or the tissue which connects the muscle to the bone (tendon).

Strapping: The application of adhesive plaster or tape in overlapping strips for the purpose of restricting movement or immobilizing a body part.

Taping: The application of tape for the purpose of reducing pain and improving function, by supporting joints and facilitating normal muscle tone and proprioception. The level of support provided is proportional to the rigidity of the tape used.

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### Index

Buddy taping

**The use of specific product names is illustrative only. It is not intended to be a recommendation of one product over another, and is not intended to represent a complete listing of all products available.**

### History

Status	Date	Action
Reviewed	11/09/2023	Medical Policy & Technology Assessment Committee (MPTAC) review. Updated References sections.
Reviewed	11/10/2022	MPTAC review. Updated Discussion and References sections.
Reviewed	11/11/2021	MPTAC review. Updated Discussion and References sections.
Reviewed	11/05/2020	MPTAC review. Updated Description and References sections. Reformatted Coding section.
Reviewed	11/07/2019	MPTAC review. Updated Description, References, Website and Index sections.
Reviewed	01/24/2019	MPTAC review. Updated References and Websites for Additional Information sections.
Reviewed	01/25/2018	MPTAC review. Updated References section. The document header wording updated from "Current Effective Date" to "Publish Date."
Reviewed	02/02/2017	MPTAC review. Updated Discussion, References and Websites sections.
Revised	02/04/2016	MPTAC review. Added medically necessary indication for post-operative care of the foot or toes. Updated Discussion, References and Websites for Additional Information.
New	11/05/2015	MPTAC review. Initial document development.

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Alternatively, commercial or FEP plans or lines of business which determine there is not a need to adopt the guideline to review services generally across all providers delivering services to Plan's or line of business's members may instead use the clinical guideline for provider education and/or to review the medical necessity of services for any provider who has been notified that his/her/its claims will be reviewed for medical necessity due to billing practices or claims that are not consistent with other providers, in terms of frequency or in some other manner.

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