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Policy Effective Date	04/01/2024
Policy End Date	12/31/2025

Work Hardening

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Related Policies (if applicable)
None

Disclaimer

Carefully check state regulations and/or the member contract.

Each benefit plan, summary plan description or contract defines which services are covered, which services are excluded, and which services are subject to dollar caps or other limitations, conditions or exclusions. Members and their providers have the responsibility for consulting the member's benefit plan, summary plan description or contract to determine if there are any exclusions or other benefit limitations applicable to this service or supply. **If there is a discrepancy between a Medical Policy and a member's benefit plan, summary plan description or contract, the benefit plan, summary plan description or contract will govern.**

Coverage

This medical policy has become inactive as of the end date above. See medical policy THE803.010 Physical Therapy (PT) and Occupational Therapy (OT) Services for dates of service 01/01/2026 and after.

Work hardening programs **are considered not medically necessary**, as they are for the purpose of conditioning for a return to work and not for the treatment of a medical condition.

Policy Guidelines

None.

Description

Work hardening is a highly specialized rehabilitation program that is designed to restore functional and work capacities through the application of graded work simulation. This

multidisciplinary program is generally administered by physical or occupational therapists working independently or as part of a team with physicians, vocational counselors, psychologists, and other rehabilitation specialists. Activities are designed to improve overall physical condition, including strength, endurance, and coordination to perform a specific work activity. Tasks may also include structured work times and duties, dressing appropriately for one's tasks, and conducting oneself in a worker-like manner. (1)

The goals of work rehabilitation are to (2):

- Maximize levels of function following injury and/or illness to maintain a desired quality of life for the worker;
- Facilitate the safe and timely return of individuals to work following injury and/or illness;
- Remediate and/or prevent future injury or illness;
- Assist individuals in retaining or resuming their worker role, which can contribute to self-confidence and a view of self as a productive member in society, and to prevent the negative psychosocial consequences of unemployment.

Rationale

This policy was originally created in 1993 and has been updated regularly with searches of the PubMed database. Most recently, the literature was searched through February 22, 2024. The following is a summary of the key literature to date.

In 2005, Beutel et al. (3) aimed to determine the impact of a vocational training program on short and long-term outcomes after psychosomatic rehabilitation. One thousand five hundred ninety (n=1,590) inpatients were screened for vocational integration. A high-risk group of 266 patients was randomly assigned to the vocational training program plus psychosomatic treatment; treatment as usual served as a control condition. An occupational training was conducted at local companies, closely integrated into psychosomatic treatment. Vocational attitudes and adjustment were studied at intake, discharge, three, 12 and 24 month follow-ups. More than half of the study participants were unemployed and/or long-term work-disabled harboring strong negative attitudes toward returning to work. Forty-six percent of the intervention group declined from participation but complied with follow-up investigation. At discharge, participants of the vocational training program had become more optimistic regarding resuming work. At one year following discharge, participants of the training program reported less absence from work. After 24 months, vocational adjustment had improved considerably among program participants, and declined among controls and refusers. An intensive vocational training program is effective in promoting positive attitudes to work, reducing work disability and promoting return-to-work. However, a randomized design may be not optimal; evaluation necessitates long-term follow-up.

In 2005, Bonde et al. (4) believed that goal setting and motivational factors are strongly associated with maintaining a job and returning to work after sick leave, but research into the effects of interventions targeting these factors was limited. Bonde et al. conducted a

randomized controlled trial (RCT) to examine the vocational effect of intervention focusing on motivation, goal setting and planning for return to work. Of 243 patients at risk of long-term sick leave or job dropout, 184 (76%) provided complete baseline information for the study. After randomization to an intervention group (n=92) and a reference group (n=92), occupational physicians examined the participants in accordance with standard guidelines. The intervention group received additional support from a social worker to enhance goal setting, motivation and planning for return to work. After 1 year 163 participants (89%) provided data on general health and employment status. The risk of not being gainfully employed was analyzed by logistic regression analysis with adjustment for several covariates. The intervention did not increase the likelihood of gainful employment after 1 year or reduce the average number of days of sick leave. The authors concluded a low-cost counselling program addressing motivation, goal setting and planning for return to work did not improve vocational outcomes or reduce sick leave among patients with work-related disorders.

In 2010, Schaafsma and colleagues (5) reevaluated work conditioning, work hardening and functional restoration for workers with back and neck pain that was initially published in 2003. The authors aimed to compare the effectiveness of physical conditioning programs in reducing time lost from work for individuals with back pain. The following databases from June/July 2008 were examined: CENTRAL (The Cochrane Library 2008, issue 3), MEDLINE from 1966, EMBASE from 1980, CINAHL from 1982, PsycINFO from 1967, and PEDro. The authors focused on RCTs and cluster RCTs that studied workers with work disability related to back pain and who were included in physical conditioning programs. Two authors independently extracted data and assessed risk of bias. Thirty-seven references, reporting on 23 RCTs (3676 workers) were included, 13 of which had a low risk of bias. In 14 studies, physical conditioning programs were compared to usual care. In workers with acute back pain, there was no effect on sickness absence. For workers with subacute back pain, conflicting results were found, but subgroup analysis showed a positive effect of interventions with workplace involvement. In workers with chronic back pain, pooled results of five studies showed a small effect on sickness absence at long-term follow-up (Standardized mean difference -0.18 (95% confidence interval -0.37 to 0.00). In workers with chronic back pain, physical conditioning programs were compared to other exercise therapy in 6 studies, with conflicting results. The addition of cognitive behavioral therapy to physical conditioning programs was not more effective than the physical conditioning alone. The authors concluded the effectiveness of physical conditioning programs in reducing sick leave when compared to usual care or than other exercises in workers with back pain remains uncertain. In workers with acute back pain, these programs probably have no effect on sick leave, but there may be a positive effect on sick leave for workers with subacute and chronic back pain. Workplace involvement might improve the outcome. Better understanding of the mechanism behind physical conditioning programs and return-to-work is needed to develop more effective interventions.

In 2014, Varatharajan et al. (6) conducted a systematic review to evaluate literature on the effectiveness of work disability prevention (WDP) in workers with neck pain, whiplash-associated disorders (WAD), or upper extremity disorders. Electronic databases were searched from 1990 to 2012 and random pairs of independent reviewers critically appraised eligible

studies using the Scottish Intercollegiate Guidelines Network criteria. Scientifically admissible studies were summarized and synthesized following best-evidence synthesis methodology. Of the 6,359 articles retrieved, 16 RCTs were eligible for critical appraisal and 5 were admissible. They noted a return to work coordination program (including workplace-based work hardening) was superior to clinic-based work hardening for persistent rotator cuff tendinitis. Workplace high-intensity strength training and workplace advice had similar outcomes for neck and shoulder pain. Mensendieck/Cesar postural exercises and strength and fitness exercises had similar outcomes for non-specific work-related upper limb complaints. Adding a brief job stress education program to a workplace ergonomic intervention was not beneficial for persistent upper extremity symptoms. Adding computer-prompted work breaks to ergonomic adjustments and workplace education benefited workers' recovery from recent work-related neck and upper extremity complaints. At present, no firm conclusions can be drawn regarding the effectiveness of WDP interventions for managing neck pain, WAD, and upper extremity disorders. Our review suggests a return-to-work coordination program is more effective than clinic-based work hardening. Also, adding computer-prompted breaks to ergonomic and workplace interventions benefits workers' recovery. The current quality of evidence does not allow for a definitive evaluation of the effectiveness of ergonomic interventions.

Summary of Evidence

Available literature involves utilizing work hardening programs in individuals with neck injuries, back pain and arthritis. Further literature focuses on the reduction of time lost from work when work hardening programs are implemented. At present, work hardening programs are considered not medically necessary, as they are for conditioning for a return to work and not for the treatment of a medical condition.

Professional Guidelines and Position Statements

There were no professional guidelines or position statements found that would influence the coverage position of this medical policy.

Ongoing and Unpublished Clinical Trials

A search of ClinicalTrials.gov did not identify any clinical trials that would likely influence this policy.

Coding

Procedure codes on Medical Policy documents are included **only** as a general reference tool for each policy. **They may not be all-inclusive.**

The presence or absence of procedure, service, supply, or device codes in a Medical Policy document has no relevance for determination of benefit coverage for members or reimbursement for providers. **Only the written coverage position in a Medical Policy should be used for such determinations.**

Benefit coverage determinations based on written Medical Policy coverage positions must include review of the member's benefit contract or Summary Plan Description (SPD) for defined coverage vs. non-coverage, benefit exclusions, and benefit limitations such as dollar or duration caps.

CPT Codes	97545, 97546
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HCPCS Codes	None
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*Current Procedural Terminology (CPT®) ©2023 American Medical Association: Chicago, IL.

References

1. Work Hardening. Miller-Keane Encyclopedia and Dictionary of Medicine, Nursing, and Allied Health, Seventh Edition. 2003. Available at <<http://medical-dictionary.thefreedictionary.com>> (accessed February 22, 2024).
2. American Occupational Therapy Association. Work rehabilitation Fact Sheet (2017). Available at <<https://aota.org>> (accessed August 19, 2022).
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4. Bonde JP, Rasmussen MS, Hjøllund H, et al. Occupational disorders and return to work: a randomized controlled study. *J Occup Rehabil.* Jul 2005; 37(4):230-235. PMID 16024479
5. Schaafsma F, Schonstein E, Whelan KM, et al. Physical conditioning programs for improving work outcomes in workers with back pain. *Cochrane Database Syst Rev.* Jan 20 2010; (1):CD001822. PMID 20091523
6. Varatharajan S, Côté P, Shearer HM, et al. Are work disability prevention interventions effective for the management of neck pain or upper extremity disorders? A systematic review by the Ontario Protocol for Traffic Injury Management (OPTIMa) collaboration. *J Occup Rehabil.* Dec 2014; 24(4):692-708. PMID 24522460

Centers for Medicare and Medicaid Services (CMS)

The information contained in this section is for informational purposes only. HCSC makes no representation as to the accuracy of this information. It is not to be used for claims adjudication for HCSC Plans.

The Centers for Medicare and Medicaid Services (CMS) does not have a national Medicare coverage position. Coverage may be subject to local carrier discretion.

A national coverage position for Medicare may have been developed since this medical policy document was written. See Medicare's National Coverage at <<http://www.cms.hhs.gov>>.

Policy History/Revision

Date	Description of Change
12/31/2025	Document became inactive.
04/01/2024	Document updated with literature review. Coverage unchanged. No new references added.
07/15/2023	Reviewed. No changes.

10/15/2022	Document updated with literature review. Coverage unchanged. No new references added.
10/01/2021	Reviewed. No changes.
12/15/2020	Document updated with literature review. Coverage unchanged. No new references added.
10/15/2019	Reviewed. No changes.
06/15/2018	Document updated with literature review. Coverage unchanged. Removed references 7-16.
07/15/2017	Document updated with literature review. Coverage unchanged.
09/01/2016	Reviewed. No changes.
10/15/2015	Document updated with literature review. No changes.
09/01/2014	Reviewed. No changes.
12/15/2013	Document updated with literature review. Coverage unchanged. CPT/HCPCS codes updated.
03/01/2008	Revised document
03/01/2006	Revised/updated entire document
12/01/2003	Revised/updated entire document
09/01/1996	Revised document
05/01/1996	Revised document
04/01/1993	Revised document
01/01/1993	New medical document