General Literature Search Strategy for Medical Treatment Guidelines

Studies were identified through the electronic database of PubMed (with specified search terms) and from articles identified by searches. For some articles, the literature citation database Web of Science was used when it was desirable to find literature that cited a particular article. Relevant evidence statements from Cochrane and British Medical Journal (BMJ) Clinical Evidence were reviewed. Selected guidelines/systematic reviews were also reviewed. The reference lists from other literature and tables of content from related journals were scanned for relevant articles (i.e., a hand search of literature was completed). Suggestions from various volunteer advisory bodies to the Division of Workers' Compensation were solicited.

Literature reviewed was in English. Literature searches were limited according to study type and human adults. Only randomized clinical trials (RCT) or meta-analyses were used for evidence statements regarding treatment. RCTs that compared an intervention with not using that intervention (e.g., surgery and non-operative treatment) were designated as more relevant to workers’ compensation guidelines than those RCTs which compared variations on technique or types of devices.

Beginning with the Traumatic Brain Injury Medical Treatment Guideline Revision of 2012, RCTs may not have been critiqued individually if they were included in a critiqued meta-analysis of high quality. Relevant RCTs published after a Cochrane meta-analysis were evaluated as to whether they would have likely met the Cochrane inclusion criteria. If so, the Cochrane software (RevMan) was used to update the pooled effect measure and compare it with the original Cochrane report. Diagnostic accuracy studies were critiqued for diagnostic testing evidence. Cohort, cross-sectional and case-control studies were critiqued for causation evidence statements. Literature which did not meet requirements for evidence statements could be referenced if it furnished useful background information or described interventions which are considered generally accepted by a consensus of health care providers. This information sometimes contributed to consensus decisions by the multi-disciplinary task force drafting the guidelines. Literature that was determined either be unrelated to the clinical issue, did not reflect interventions likely to occur in Colorado, or which had such poor quality on initial review that it could not qualify for evidence nor provide meaningful input was not critiqued. All articles sent by the public were formally reviewed.